PERRY
ELECTRIC

CATALOGUE
2010/2011



1969 ... 2009, 40 years on the market

PERRY ELECTRIC SRL

ITALIAN COMPANY FOR THE MANUFACTURING OF ELECTRICAL APPLIANCES, AN INNOVATION-ORIENTED COMPANY



Perry Electric designs and manufactures electrical appliances for controlling time, energy, climatic comfort, gas safety and for the future of the domotic house:
wireless telephones with built-in video entry-phone and video control functions, as well as heat accounting and temperature control systems.

Internet web site: **www.perry.it**



CORPORATE DIVISIONS



COMPONENTS OF ELECTRICAL SYSTEMS

PERRY ELECTRIC



VIDEOCOMMUNICATION

PERRY VIDEOPHONE



HEAT ACCOUNTING AND TEMPERATURE CONTROL SYSTEMS

PERRY ENERGY





The constant expansion of thermohydraulic and electrical distribution allows Perry to be closer and closer to its customers.
Three branches: Spain, France, Germany and the presence in more than 40 countries worldwide are the heritage of the Company, which pays attention to the needs of every geographical area.

LEADING ROLE IN THE DEVELOPMENT OF ELECTRONIC TECHNOLOGY



Perry Electric invests important resources in R&D activities in order to keep its range of products constantly updated; indeed, the products comply with the most innovatory market demands. Constant employment of economic resources and people, who form a group that is highly motivated to achieve company success on the market.

Perry branded products comply with the following European Directives: ROHS 2002/95/EC, REACH 1907/2006, BATTERIES AND ACCUMULATORS 2006/66/EC, RAEE 2003/96/EC



PERRY ELECTRIC certified company VISION 2000 by the CSQ Institution

A steady reference for the customers and the guarantee to the market for product quality.

All processing phases:
from design to product manufacturing, are integral parts of the company heritage.
The goal is to reach a quality standard that meets the most demanding needs of our customers who install thermohydraulic and electrical equipment.







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NEW SYSTEMS

Chronothermostats and thermostats radio control the zone valves that are installed in distribution manifolds.





COMPONENTS OF THE **SYSTEM** FOR **WIRELESS TEMPERATURE CONTROL**

Chronothermostats



CRTX03

Thermostats



TETX03

PDA ENERGY
It is a temperature control system that allows obtaining considerable savings (up to 30%) on heating costs.

BECAUSE
It adjusts the temperature by zones and for every room according to real needs of use for desired temperatures and time periods.

PDA ENERGY
Products that are installed without any masonry work.

BECAUSE
They are battery-powered and work in radio frequency.



Chronothermostats and thermostats radio control the electronic valves that are installed in the radiators.

CE marking standards:

LVD: 2006/95/CE	*EN 60950-1, EN 60730-1*
EMC: 2004/108/CE	***EN 301 489-1**, EN 301 489-3*
Radio: 1999/5/CE	***EN 300 220-1**, EN 300 220-3*

Electronic valves



VTRX01/3

Control units



CCRX01

Radio receivers



RX01/P



RX02/P



RX0801/P

Control boxes



BC0401/230



BC0601/230



BC0801/230

CODE	DESCRIPTION	PACKAGE
1TX CRTX03	**Chronothermostat with 868.35MHz radiofrequency output**	**1**



Power supply 3V – 2x1.5V AAA alkaline
LCD 2" ½
ON/OFF operation with adjustable differential switch 0.2 – 0.7°C
5 preset programs + 1 free
Temperature levels 2 + anti-freeze being excludable or adjustable
Range: 30 - 130m
MASTER function
Minimum programming 30 minutes
Temporary / permanent manual operation
Interruption button for cleaning operations
Telephone control input
SUM/WIN control
White colour
Dimensions (LxWxH) 120 x 21 x 80

1TX TETX03	**Thermostat with 868.35 MHz radiofrequency output**	**1**



Power supply 3V – 2x1.5V size C alkaline
ON/OFF operation with adjustable differential switch 0.3 – 0.6°C
Temperature levels 2
1 direct 1 indirect
Range: 30 - 130m
SUM/WIN control
ON status indicator
LOW BATTERY indicator
Radio transmission indicator
White colour
Dimensions (LxWxH) 76 x 40

1TX VTRX01/3	**Electronic valve for radiators with 868.35MHz radio receiver**	**1**



Power supply 3V 2x1.5V C alkaline
ON/OFF operation
IP 30
RF signal level indicator
Fault and/or battery charge indicator
Valve opening/closing condition indicator
Threaded coupling for radiators with adaptation ring nut for the main thermostatic valves
White colour
Dimensions (LxWxH) 62 x 70 x 97

1TX CCRX01	**Control unit for zone status 868.35MHz**	**1**



The control unit activates the load (pump/boiler) with at least one open electronic valve

Power supply 230V a.c. 50Hz
1 potential-free changeover contact output: 5(2)A/250V
Reception frequency: 868.35Mhz
RF signal level indicator
White colour
Dimensions (LxWxH) 133 x 25 x 90

1TX RX01/P	**1-zone wall-mounted radio receiver**	**1**



Power supply 230V a.c. 50-60Hz
Reception frequency: 868.35Mhz
1 potential-free changeover contact: output 5(2)A/250V
Manual ON/OFF control
RF signal level indicator
White colour
Dimensions (LxWxH) 133 x 25 x 90

1TX RX01/M	**Radio receiver module with 1 output relay**	**1**



Power supply 230V a.c. 50-60Hz
Reception frequency: 868.35Mhz
1 potential-free changeover contact output: 5(2)A/250V
Manual ON/OFF control,
RF signal level indicator
White colour
Dimensions (LxWxH) 60 x 40 x 60

1TX RX02/P	**2-zones wall-mounted radio receiver + 1 circulation pump output**	**1**



Power supply 230V a.c. 50-60Hz
Reception frequency: 868.35Mhz
2 potential-free changeover contacts output: (2)A/250V
+ 1 Output to control the circulation pump 5(2) A/250V a.c.
Manual ON/OFF control,
RF signal level indicator
Signal to control the activated circulation pump
White colour
Dimensions (LxWxH) 133 x 25 x 90

1TX RX0801/P	**8-zones wall-mounted radio receiver + 1 circulation pump output**	**1**



Power supply 230V a.c. 50-60Hz
Reception frequency: 868.35Mhz
BUS RS 485 output for 8-output control
+ 1 circulation pump control output
Manual ON/OFF control
RF signal level indicator
Signal to control the activated circulation pump
Adjustable pump control delay 0" or 120"
White colour
Dimensions (LxWxH) 133 x 25 x 90

CODE	DESCRIPTION	PACKAGE
1TX BC0401/230	**4-zones Control box**	**1**
	Power supply 230V a.c. 50-60Hz Protection IP52 (IP32 with accessory cable glands) 4 polarized output at 230V Load 8(2) A/250V a.c. Mains connection indicator LED + 1 output to control the circulation pump 8(2) A/250V a.c. Fault indicator LED ON/OFF zone status indicator LED Connection to receiver RX0801/P ON/OFF pump status indicator LED with BUS RS 485 Dimensions (LxWxH) 250 x 76 x 43	
1TX BC0601/230	**6-zones Control box**	**1**
	Power supply 230V a.c. 50-60Hz Protection IP52 (IP32 with accessory cable glands) 6 polarized outputs at 230V Load 8(2) A/250V a.c. Mains connection indicator LED + 1 output to control the circulation pump 8(2) A/250V a.c. Fault indicator LED ON/OFF zone status indicator LED Connection to receiver RX0801/P ON/OFF pump status indicator LED with BUS RS 485 Dimensions (LxWxH) 250 x 76 x 43	
1TX BC0801/230	**8-zones Control box**	**1**
	Power supply 230V a.c. 50-60Hz Protection IP52 (IP32 with accessory cable glands) 8 polarized output at 230V Load 8(2) A/250V a.c. Mains connection indicator LED + 1 output to control the circulation pump 8(2) A/250V a.c. Fault indicator LED ON/OFF zone status indicator LED Connection to receiver RX0801/P ON/OFF pump status indicator LED with BUS RS 485 Dimensions (LxWxH) 250 x 76 x 43	
1TX CRTXRX/01	**Kit including 1 radio chronothermostat + 1 wall-mounted 1-zone radio receiver**	**4**
	*Kit including no. 1 1TX CRTX03 + no. 1 1TX RX01/P*	
1TX CRTXRX/02	**Kit including 2 radio chronothermostats + 1 wall-mounted 2-zone radio receiver**	**4**
	*Kit including no. 2 1TX CRTX03 + no. 1 1TX RX02/P*	
1TX TETXRX01	**Kit including 1 radio thermostat + 1 wall-mounted 1-zone radio receiver**	**4**
	*Kit including no. 1 1TX TETX03 + no. 1 1TX RX01/P*	
1TX TETXRX02	**Kit including 2 radio thermostats + 1 wall-mounted 2-zone radio receiver**	**4**
	*Kit including no. 2 1TX TETX03 + no. 1 1TX RX02/P*	
1PA PPBC01	**Cable trays / glands for control boxes**	**1**
	Package code comprehensive of no. 11 cable trays / glands for control boxes protection degree IP32	
1PA ASVT01	**Angled adapter for electronic valves on radiators**	**1**
	*It allows the vertical installation of the electronic valves on the radiators*	
1PA CA01VT	**Anti-unscrewing collar for electronic valves**	**1**
	Plastic ring for electronic valves to be used to prevent the user from disassembling the valves	
1PA SG02VT	**Anti-tampering seal for electronic valves**	**1**

PRODUCTS FOR **WALL MOUNTING**

ROOM CHRONOTHERMOSTATS
DIGITAL

ZEFIRO



CR022A - CR022B

ZEFIRO LIGHT



CR023A - CR023B
CR024A - CR024B

ZEFIRO GSM



CR025B

SLIM



CR011A
CR011B

ROOM THERMOSTATS
DIGITAL

ZEFIRO 120x80



TE520A - TE520B
TE521A - TE521B

ZEFIRO GSM 120x80



TE525B

ZEFIRO 80x80



TE530A - TE530B
TE531A - TE531B
TE532A - TE532B

SLIM



TE400/B - TE410/B
TE402/B - TE411/B

PRODUCTS FOR **INDUSTRIAL** INSTALLATION

2DIN MODULAR THERMOSTATS

ELECTRONIC



TE082 - TE083 - TE084
TE075 - TE076 - TE077 - TE078

ELECTRONIC FOR SWITCHBOARDS



TE052/M

CONTACT THERMOSTATS

MECHANICAL



TB060 - TB065 - TB071
TB081 - TB088 - TB090 - TB091

UP&DOWN COMPACT



CR018A - CR018B
CR018/MA

EASY



CR308/G - CR309/S

ELECTRONIC

ZEFIRO



TE500A - TE500B
TE501A - TE501B
TE502B
TE503A - TE503B
TE504B
TE565A - TE565B
TE566A - TE566B

EUROPA



TE036 - TE041
TE046
TE065 - TE066

WITH GAS EXPANSION

TEG



TEG130 - TEG131 - TEG131RA
TEG132 - TEG136 - TEG138RN

CONTROL APPLIANCES

CONTROL BOXES



BP04230 - BP06230 - BP08230

	CE marking standards:
LVD: 2006/95/CE	***EN 60730-1**, EN 60730-2-9*
EMC: 2004/108/CE	***EN 60730-1**, EN 60730-2-9*



CODE	DESCRIPTION	PACKAGE
1CR CR022A	**Weekly digital chronothermostat 3V series "ZEFIRO", anthracite colour**	**10**
1CR CR022B	**Weekly digital chronothermostat 3V series "ZEFIRO", white colour**	**10**




Power supply 3V – 2x1.5V AA alkaline
LCD display, 3" ¾
1 potential-free changeover contact output: 8(2)A/250Va.c.
ON/OFF operation with adjustable differential switch 0.2 – 2°C
5 preset programs + 1 free
Temperature levels 3 + anti-freeze
Temperature adjustable by 0.5°C sets
Consumption counter
Minimum programming 30 minutes
Temporary / permanent manual operation
System irregularity signalling
Interruption button for cleaning operations
Telephone control input
Intelligent operation
SUM/WIN control
Holiday Program
Pump activation program
Temperature setting lock
Dimensions (LxWxH) 120 x 27.6 x

1CR CR023A	**Weekly digital chronothermostat 3V series "ZEFIRO", anthracite colour**	**10**
1CR CR023B	**Weekly digital chronothermostat 3V series "ZEFIRO", white colour**	**10**




backlit display

Power supply 3V – 2x1.5V AA alkaline
LCD display, 3" ¾ backlit
1 potential-free changeover contact output: 8(2)A/250Va.c.
ON/OFF operation with adjustable differential switch 0.2 – 2°C or proportional with control period 7/10/13/20 minutes
5 preset programs + 1 free
Temperature levels 3 + anti-freeze
Temperature adjustable by 0.1°C sets
Consumption counter
Minimum programming 30 minutes
Temporary / permanent manual operation
System irregularity signalling
Interruption button for cleaning operations
Telephone control input
Intelligent operation
SUM/WIN control
Holiday Program
Pump activation program
Temperature setting lock
Detection t correction according to product positioning
Dimensions (LxWxH) 120 x 27.6 x 82

1CR CR024A	**Weekly digital chronothermostat 230V series "ZEFIRO", anthracite colour**	**10**
1CR CR024B	**Weekly digital chronothermostat 230V series "ZEFIRO", white colour**	**10**




backlit display

Power supply 230V 50-60Hz
LCD display, 3" ¾ backlit
1 potential-free changeover contact output: 8(2)A/250Va.c.
ON/OFF operation with adjustable differential switch 0.2 – 2°C or proportional with control period 7/10/13/20 minutes
5 preset programs + 1 free
Temperature levels 3 + anti-freeze
Temperature adjustable by 0.1°C sets
Consumption counter
Minimum programming 30 minutes
Temporary / permanent manual operation
Timed or fixed backlighting
System irregularity signalling
Interruption button for cleaning operations
Intelligent operation
SUM/WIN control
Holiday Program
Pump activation program
Temperature setting lock
Detection t correction according to product positioning
Dimensions (LxWxH) 120 x 27.6 x 82

1CR CR025B	**Weekly digital chronothermostat 230V series "ZEFIRO" with GSM modem, white colour**	**1**



backlit display

Power supply 230V 50-60Hz
Built-in GSM modem for receiving remote controls
LCD display, 3" ¾ backlit
1 potential-free changeover contact output: 8(2)A/250Va.c.
ON/OFF operation with adjustable differential switch 0.2 – 2°C or proportional with control period 7/10/13/20 minutes
5 preset programs + 1 free
Temperature levels 3 + anti-freeze
Temperature adjustable by 0.1°C sets
Consumption counter
Minimum programming 30 minutes
Temporary / permanent manual operation
Timed or fixed backlighting
System irregularity signalling
Interruption button for cleaning operations
Intelligent operation
SUM/WIN control
Holiday Program
Pump activation program
Temperature setting lock
Detection t correction according to product positioning
Dimensions (LxWxH) 120 x 37 x 82

CODE	DESCRIPTION	PACKAGE
1CR CR011A	**Weekly digital chronothermostat 3V series "SLIM", anthracite colour**	**10**
1CR CR011B	**Weekly digital chronothermostat 3V series "SLIM", white colour**	**10**



Power supply 3V – 2x1.5V AAA alkaline
LCD display, 2" ½
1 potential-free changeover contact output: 8(2)A/250Va.c.
ON/OFF operation with adjustable differential switch 0.2 – 2°C
5 preset programs + 1 free
Temperature levels 3 + anti-freeze
consumption counter
Minimum programming 30 minutes
Temporary / permanent manual operation
System irregularity signalling
Interruption button for cleaning operations
Telephone control input
Intelligent operation
Holiday Program
Pump activation program
Temperature setting lock
Dimensions (LxWxH) 120 x 21 x 80

1CR CR018A	**Weekly digital chronothermostat 3V series "UP&DOWN Compact", anthracite colour**	**10**
1CR CR018B	**Weekly digital chronothermostat 3V series "UP&DOWN Compact", white colour**	**10**
1CR CR018/MA	**Weekly digital chronothermostat 3V series "UP&DOWN Compact", silver metal colour**	**10**



Power supply 3V – 2x1.5V AAA alkaline
LCD display, 4" ½
1 potential-free changeover contact output: 8(2)A/250Va.c.
ON/OFF operation with adjustable differential switch 0.1 – 0.9°C
Temperature levels 10 + anti-freeze
Consumption counter
Minimum programming 60 minutes
Temporary / permanent manual operation
System irregularity signalling
Interruption button for cleaning operations
Telephone control input
Holiday Program
Pump activation program
Temperature setting lock
Dimensions (LxWxH) 133 x 26 x 90

1CR CR308/G	**Daily digital analogue chronothermostat 3V series "EASY"**	**10**
1CR CR309/S	**Weekly digital analogue chronothermostat 3V series "EASY"**	**10**



Power supply 3V – 2x1.5V AA alkaline
LCD display, 2" 2/3
1 potential-free changeover contact output: 8(2)A/250Va.c.
ON/OFF operation with adjustable differential switch 0.3/0.5/0.7/0.9°C or adjustable proportional cycle 7/10/15/20 min
Temperature adjustment on graduated scale with set-point mechanical index
Temperature levels 2 + anti-freeze fixed at 5°C
Minimum programming 30 minutes
Permanent manual operation
Total ON/OFF function
Temperature mechanical lock
Telephone control input
White colour
Dimensions (LxWxH) 121.5 x 31.5 x 82

WALL-MOUNTED WIRED TEMPERATURE CONTROL EQUIPMENT
ROOM THERMOSTATS SERIES **ZEFIRO 120 X 80**

CODE	DESCRIPTION	PACKAGE
1TP TE520A	**Digital thermostat 3V series "ZEFIRO" 120x80, anthracite colour**	**10**
1TP TE520B	**Digital thermostat 3V series "ZEFIRO" 120x80, white colour**	**10**



backlit display

Power supply 3V – 2x1.5V AA alkaline
LCD display, 2" 2/3 backlit
1 potential-free changeover contact output: 8(2)A/250Va.c.
ON/OFF operation with adjustable differential switch 0.2 – 2°C or proportional with control period 7/10/13/20 minutes
Temperature levels 2 + anti-freeze
Temperature adjustable by 0.1°C sets
Telephone control input

LOW BAT indicator
Relay status indicator
SUM/WIN control
Password-protected MAX and MIN temperature set lock
Detection t correction according to product positioning
Wall-mounting and/or semi-recessed installation
Dimensions (LxWxH) 120 x 27.6 x 82

1TP TE521A	**Digital thermostat 230V series "ZEFIRO" 120x80, anthracite colour**	**10**
1TP TE521B	**Digital thermostat 230V series "ZEFIRO" 120x80, white colour**	**10**



backlit display

Power supply 230V a.c. 50-60Hz
LCD display, 2" 2/3 backlit
1 potential-free changeover contact output: 8(2)A/250Va.c.
ON/OFF operation with adjustable differential switch 0.2 – 2°C or proportional with control period 7/10/13/20 minutes
Temperature levels 2 + anti-freeze
Temperature adjustable by 0.1°C sets
Telephone control input

Timed or fixed backlighting
Relay status indicator
SUM/WIN control
Password-protected MAX and MIN temperature set lock
Detection t correction according to product positioning
Wall-mounting and/or semi-recessed installation
Dimensions (LxWxH) 120 x 27.6 x 82

1TP TE525B	**Digital thermostat 230V series "ZEFIRO" 120x80, with GSM modem - white colour**	**1**



backlit display

Power supply 230V 50-60Hz
Built-in GSM modem for receiving remote controls
LCD display, 2" 2/3 backlit
1 potential-free changeover contact output: 8(2)A/250Va.c.
ON/OFF operation with adjustable differential switch 0.2 – 2°C or proportional with control period 7/10/13/20 minutes
Temperature levels 2 + anti-freeze

Temperature adjustable by 0.1°C sets
Timed or fixed backlighting
Relay status indicator
SUM/WIN control
Password-protected MAX and MIN temperature set lock
Detection t correction according to product positioning
Dimensions (LxWxH) 120 x 37 x 82



CODE	DESCRIPTION	PACKAGE
1TP TE530A	**Digital thermostat 3V series "ZEFIRO" 80 x 80, anthracite colour**	**10**
1TP TE530B	**Digital thermostat 3V series "ZEFIRO" 80 x 80, white colour**	**10**



Power supply 3V – 2x1.5V AAA alkaline
LCD display, 2" 1/3
1 potential-free changeover contact output: 5(3)A/250Va.c.
ON/OFF operation with adjustable differential switch 0.2 – 2°C or proportional with control period 7/10/13/20 minutes
Temperature levels 2 + anti-freeze
Temperature adjustable by 0.1°C sets
LOW BAT indicator
Relay status indicator
SUM/WIN control
Temperature setting lock
Detection t correction according to product positioning
Dimensions (LxWxH) 84 x 23 x 84

1TP TE531A	**Digital thermostat 230V series "ZEFIRO" 80 x 80, anthracite colour**	**10**
1TP TE531B	**Digital thermostat 230V series "ZEFIRO" 80 x 80, white colour**	**10**



Power supply 230V a.c. 50-60Hz
LCD display, 2" 1/3
1 potential-free changeover contact output: 5(3)A/250Va.c.
ON/OFF operation with adjustable differential switch 0.2 – 2°C or proportional with control period 7/10/13/20 minutes
Temperature levels 2 + anti-freeze
Temperature adjustable by 0.1°C sets
Relay status indicator
SUM/WIN control
Temperature setting lock
Detection t correction according to product positioning
Dimensions (LxWxH) 84 x 23 x 84

1TP TE532A	**Digital thermostat 230V series "ZEFIRO" 80x80, for public areas anthracite colour**	**10**
1TP TE532B	**Digital thermostat 230V series "ZEFIRO" 80x80, for public areas white colour**	**10**



Power supply 230V a.c. 50-60Hz
LCD display, 2" 1/3
1 potential-free changeover contact output: 5(3)A/250Va.c.
ON/OFF operation with adjustable differential switch 0.2 – 2°C or proportional with control period 7/10/13/20 minutes
Temperature levels 2 + anti-freeze
Temperature adjustable by 0.1°C sets
Inaccessible controls, reserved to installer:
- temperature SET adjustment
- SUM/WIN
- ON/OFF
- adjustment settings
- detection t correction according to product positioning

Dimensions (LxWxH) 89.7 x 27 x 87.4



CODE	DESCRIPTION	PACKAGE

1TP TE400/B — **Digital thermostat 3V series "SLIM" with ON/OFF NIGHT REDUCTION control** — **10**



Power supply 3V – 2x1.5V AAA alkaline
LCD display, 1"
1 potential-free changeover contact output: 8(2)A/250Va.c.
ON/OFF operation with settable differential switch 0.3/0.5/0.7/0.9°C
Adjustment according to a graduated scale with analogue and digital setting
1 temperature level with continuous adjustment + fixed reduced control

ON/OFF/NIGHT REDUCTION
LOW BAT indicator LED
Relay status indicator LED
Remote night reduction control input
Temperature setting lock
White colour
Dimensions (LxWxH) 120 x 21 x 80

1TP TE410/B — **Digital thermostat 230V series "SLIM" with ON/OFF NIGHT REDUCTION control** — **10**



Power supply 230V a.c. 50-60Hz
LCD display, 1"
1 potential-free changeover contact output: 8(2)A/250Va.c.
ON/OFF operation with settable differential switch 0.3/0.5/0.7/0.9°C
Adjustment according to a graduated scale with analogue and digital setting
1 temperature level with continuous adjustment + fixed reduced control

ON/OFF/NIGHT REDUCTION
LOW BAT indicator LED
Relay status indicator LED
Remote night reduction control input
Temperature setting lock
White colour
Dimensions (LxWxH) 120 x 21 x 80

1TP TE402/B — **Digital thermostat 3V series "SLIM" with SUM/OFF/WIN control** — **10**



Power supply 3V – 2x1.5V AAA alkaline
LCD display, 1"
1 potential-free changeover contact output: 8(2)A/250Va.c.
ON/OFF operation with settable differential switch 0.3/0.5/0.7/0.9°C
Adjustment according to a graduated scale with analogue and digital setting
1 temperature level with continuous adjustment + fixed reduced

SUM/OFF/WIN control
LOW BAT indicator LED
Relay status indicator LED
Remote night reduction control input
Temperature setting lock
White colour
Dimensions (LxWxH) 120 x 21 x 80

1TP TE411/B — **Digital thermostat 230V series "SLIM" with SUM/OFF/WIN control** — **10**



Power supply 230V a.c. 50-60Hz
LCD display, 1"
1 potential-free changeover contact output: 8(2)A/250Va.c.
ON/OFF operation with settable differential switch 0.3/0.5/0.7/0.9°C
Adjustment according to a graduated scale with analogue and digital setting
1 temperature level with continuous adjustment + fixed reduced
ON/OFF/WIN control

LOW BAT indicator LED
Relay status indicator LED
Remote night reduction control input
Temperature setting lock
White colour
Dimensions (LxWxH) 120 x 21 x 80

CODE	DESCRIPTION	PACKAGE
1TP TE500A	**Electronic thermostat series "ZEFIRO" with led, anthracite colour**	**10**
1TP TE500B	**Electronic thermostat series "ZEFIRO" with led, white colour**	**10**



Power supply 230V a.c. 50-60Hz
1 potential-free changeover contact output: 8(2)A/250Va.c.
ON/OFF operation with fixed differential switch 0.4°C
Temperature adjustment on graduated scale with mechanical index set-point
1 temperature level with continuous adjustment

Remote input for night reduction -4°C on the set-point value
Set-point with mechanical temperature lock
Relay status indicator LED
Mains connection indicator LED
Dimensions (LxWxH) 120 x 27.5 x 81

1TP TE501A	**Electronic thermostat series "ZEFIRO" with ON/OFF control, anthracite colour**	**10**
1TP TE501B	**Electronic thermostat series "ZEFIRO" with ON/OFF control, white colour**	**10**



Power supply 230V a.c. 50-60Hz
1 potential-free changeover contact output: 8(2)A/250Va.c. ON/OFF operation with fixed differential switch 0.4°C
ON/OFF control
Temperature adjustment on graduated scale with mechanical index set-point
1 temperature level with continuous adjustment

Remote input for night reduction -4°C on the set-point value
Set-point with mechanical temperature lock
Relay status indicator LED
Product OFF status indicator LED
Dimensions (LxWxH) 120 x 27.5 x 81

1TP TE502B	**Electronic thermostat with floor probe series "ZEFIRO", white colour**	**10**



Power supply 230V a.c. 50-60Hz
1 potential-free changeover contact output: 8(2)A/250Va.c.
ON/OFF operation with fixed differential switch 0.4°C
ON/OFF control
Temperature adjustment on graduated scale with mechanical index set-point
Adjustment range 0 +60°C
1 temperature level with continuous adjustment

Remote input for night reduction -4°C on the set-point value
Set-point with mechanical temperature lock
Relay status indicator LED
Product OFF status indicator LED
White colour
Dimensions (LxWxH) 120 x 27.5 x 81

1TP TE503A	**Electronic thermostat series "ZEFIRO" with SUM/WIN control, anthracite colour**	**10**
1TP TE503B	**Electronic thermostat series "ZEFIRO" with SUM/WIN control, white colour**	**10**



Power supply 230V a.c. 50-60Hz
1 potential-free changeover contact output: 8(2)A/250Va.c.
ON/OFF operation with fixed differential switch 0.4°C
SUM/OFF/WIN control
Temperature adjustment on graduated scale with mechanical index set-point
1 temperature level with continuous adjustment

Remote input for night reduction -4°C on the set-point value
Set-point with mechanical temperature lock
Relay status indicator LED
SUM/WIN indicator LED
Mains connection indicator LED
Dimensions (LxWxH) 120 x 27.5 x 81

CODE	DESCRIPTION	PACKAGE
1TP TE504B	**Electronic thermostat series "ZEFIRO" with NIGHT REDUCTION control, white colour**	**10**



Power supply 230V a.c. 50-60Hz
1 potential-free changeover contact output: 8(2)A/250Va.c.
ON/OFF operation with fixed differential switch 0.4°C
ON/OFF control/night reduction
Temperature adjustment on graduated scale with mechanical index set-point
1 temperature level with continuous adjustment

Night reduction: -4°C on the set-point value
Set-point with mechanical temperature lock
Relay status indicator LED
Night-time reduction status indicator LED
Product OFF status indicator LED
Power supply indicator LED
White colour
Dimensions (LxWxH) 120 x 27.5 x 81

1TP TE565B	**Electronic thermostat for Fan Coil series "ZEFIRO" with SUM/OFF/WIN control, white colour**	**10**
1TP TE565A	*** Electronic thermostat for Fan Coil series "ZEFIRO" with SUM/OFF/WIN control, anthracite colour**	**10**



Power supply 230V a.c. 50-60Hz
1 polarized NO contact output: 5(2)A/250Va.c.
Proportional operation with fixed control period
SUM/OFF/WIN control
Speed control I° II° III°
Temperature adjustment on graduated scale with mechanical index set-point

1 temperature level with continuous adjustment
Set-point with mechanical temperature lock
Relay status indicator LED
SUM/WIN indicator LED
Power supply indicator LED
Dimensions (LxWxH) 120 x 27.5 x 81

1TP TE566B	**Electronic thermostat for Fan Coil series "ZEFIRO", white colour**	**10**
1TP TE566A	*** Electronic thermostat for Fan Coil series "ZEFIRO", anthracite colour**	**10**



Power supply 230V a.c. 50-60Hz
1 polarized NO contact output: 5(2)A/250Va.c.
Proportional operation with fixed control period
Speed control I° II° III°
Temperature adjustment on graduated scale with mechanical index set-point

1 temperature level with continuous adjustment
Remote SUM/WIN control
Set-point with mechanical temperature lock
Relay status indicator LED
Power supply indicator LED
Dimensions (LxWxH) 120 x 27.5 x 81

* *Available upon demand*

CODE	DESCRIPTION	PACKAGE
1TP TE036	**Electronic thermostat series "EUROPA"**	**10**



Power supply 230V a.c. 50-60Hz
1 potential-free changeover contact output: 8(2)A/250Va.c.
ON/OFF operation with adjustable differential switch 0.2 - 2.5°C
Temperature adjustment on graduated scale with mechanical index set-point

1 temperature level with continuous adjustment
Set-point with mechanical temperature lock
Relay status indicator LED
White colour
Dimensions (LxWxH) 74 x 36 x 74

1TP TE041	**Electronic thermostat series "EUROPA" with SUM/WIN control**	**10**



Power supply 230V a.c. 50-60Hz
1 potential-free changeover contact output: 8(2)A/250Va.c.
ON/OFF operation with adjustable differential switch 0.2 - 2.5°C
SUM/WIN control
Temperature adjustment on graduated scale with mechanical index set-point

1 temperature level with continuous adjustment
Set-point with mechanical temperature lock
Relay status indicator LED
White colour
Dimensions (LxWxH) 74 x 36 x 74

1TP TE046	**Electronic thermostat series "EUROPA" with ON/OFF control**	**10**



Power supply 230V a.c. 50-60Hz
1 potential-free changeover contact output: 8(2)A/250Va.c.
ON/OFF operation with adjustable differential switch 0.2 - 2.5°C
ON/OFF control
Temperature adjustment on graduated scale with mechanical index set-point

1 temperature level with continuous adjustment
Set-point with mechanical temperature lock
Relay status indicator LED
White colour
Dimensions (LxWxH) 74 x 36 x 74

1TP TE065	**Electronic thermostat series "EUROPA" for "Fan Coil" with SUM/OFF/WIN control**	**10**



Power supply 230V a.c. 50-60Hz
1 polarized NO contact output: 5(2)A/250Va.c.
Proportional operation with fixed control period
SUM/OFF/WIN control
Speed control 0 I° II° III°
Temperature adjustment on graduated scale with mechanical index set-point

1 Temperature level with continuous adjustment
Set-point with mechanical temperature lock
Relay status indicator LED
Product OFF status indicator LED
White colour
Dimensions (LxWxH) 74 x 36 x 74

1TP TE066	**Electronic thermostat series "EUROPA" for "Fan Coil"**	**10**



Power supply 230V a.c. 50-60Hz
1 polarized NO contact output: 5(2)A/250Va.c.
Proportional operation with fixed control period
Speed control 0 I° II° III°
Temperature adjustment on graduated scale with mechanical index set-point

1 temperature level with continuous adjustment
Input for SUM/WIN control from remote
Set-point with mechanical temperature lock
Relay status indicator LED
White colour
Dimensions (LxWxH) 74 x 36 x 74

CODE	DESCRIPTION	PACKAGE
1TG TEG130	**Gas expansion thermostat series "TEG" without led indicator**	**30**
	Power supply 230V a.c. 50-60Hz 1 potential-free changeover contact output: 10(2)A/250Va.c. ON/OFF operation with fixed differential switch Temperature adjustment on graduated scale with mechanical index set-point 1 temperature level with continuous adjustment Set-point with mechanical temperature lock White colour Dimensions (LxWxH) 74 x 40 x 74	
1TG TEG131	**Gas expansion thermostat series "TEG" with led indicator**	**30**
	Power supply 230V a.c. 50-60Hz 1 potential-free changeover contact output: 10(2)A/250Va.c. ON/OFF operation with fixed differential switch Temperature adjustment on graduated scale with mechanical index set-point 1 temperature level with continuous adjustment Set-point with mechanical temperature lock ON/OFF indicator LED of the load White colour Dimensions (LxWxH) 74 x 40 x 74	
1TG TEG131RA	**Gas expansion thermostat series "TEG" with led indicator and Accelerating resistance**	**30**
	Power supply 230V a.c. 50-60Hz 1 potential-free changeover contact output: 10(2)A/250Va.c. ON/OFF operation with fixed differential switch Graduated scale with mechanical index 1 temperature level with continuous adjustment Set-point with mechanical temperature lock Accelerating resistance ON/OFF accelerating LED of the load White colour Dimensions (LxWxH) 74 x 40 x 74	
1TG TEG132	**Gas expansion thermostat series "TEG" with led indicator and ON/OFF control**	**30**
	Power supply 230V a.c. 50-60Hz 1 potential-free changeover contact output: 10(2)A/250Va.c. ON/OFF operation with fixed differential switch ON/OFF control Temperature adjustment on graduated scale with mechanical index set-point 1 temperature level with continuous adjustment Set-point with mechanical temperature lock ON/OFF indicator LED of the load White colour Dimensions (LxWxH) 74 x 40 x 74	
1TG TEG136	**Gas expansion thermostat series "TEG" with led indicator and SUM/WIN control**	**30**
	Power supply 230V a.c. 50-60Hz 1 potential-free changeover contact output: 10(2)A/250Va.c. ON/OFF operation with fixed differential switch SUM/WIN control Temperature adjustment on graduated scale with mechanical index set-point 1 temperature level with continuous adjustment Set-point with mechanical temperature lock ON/OFF indicator LED of the load White colour Dimensions (LxWxH) 74 x 40 x 74	
1TG TEG138RN	**Gas expansion thermostat series "TEG" with led indicator and Night Reduction**	**10**
	Power supply 230V a.c. 50-60Hz 1 potential-free changeover contact output: 10(2)A/250Va.c. ON/OFF operation with fixed differential switch Night reduction control Temperature adjustment on graduated scale with mechanical index set-point 1 temperature level with continuous adjustment Set-point with mechanical temperature lock ON/OFF indicator LED of the load White colour Dimensions (LxWxH) 74 x 40 x 74	
1PA TEG03B	**Base for thermostat installation series "TEG"**	**1**
	Base for thermostat installation series "TEG" in round and/or rectangular recessed boxes	

CODE	DESCRIPTION	PACKAGE

Zone temperature control system by using:
- chronothermostats with relay output and/or thermostats with relay output, wire-connected to the control boxes for controlling the solenoid valves installed in the distribution manifolds.

1AC BP04230 — **4-zones control box** — **1**



Power supply 230V a.c. – 50Hz
Potential-free changeover contacts: 10A/250Va.c.
4 controllable zones
Output for active pump control with at least one open zone valve
Output controlled by a time switch

Remotely controlled SUM/WIN output
WINTER operation indicator LED
SUMMER operation indicator LED
ON/OFF pump
control indicator LED
Protection degree IP 30

1AC BP06230 — **6-zones control box** — **1**



Power supply 230V a.c. – 50Hz
Potential-free changeover contacts: 10A/250Va.c.
6 controllable zones
Output for active pump control with at least one open zone valve
Output controlled by a time switch

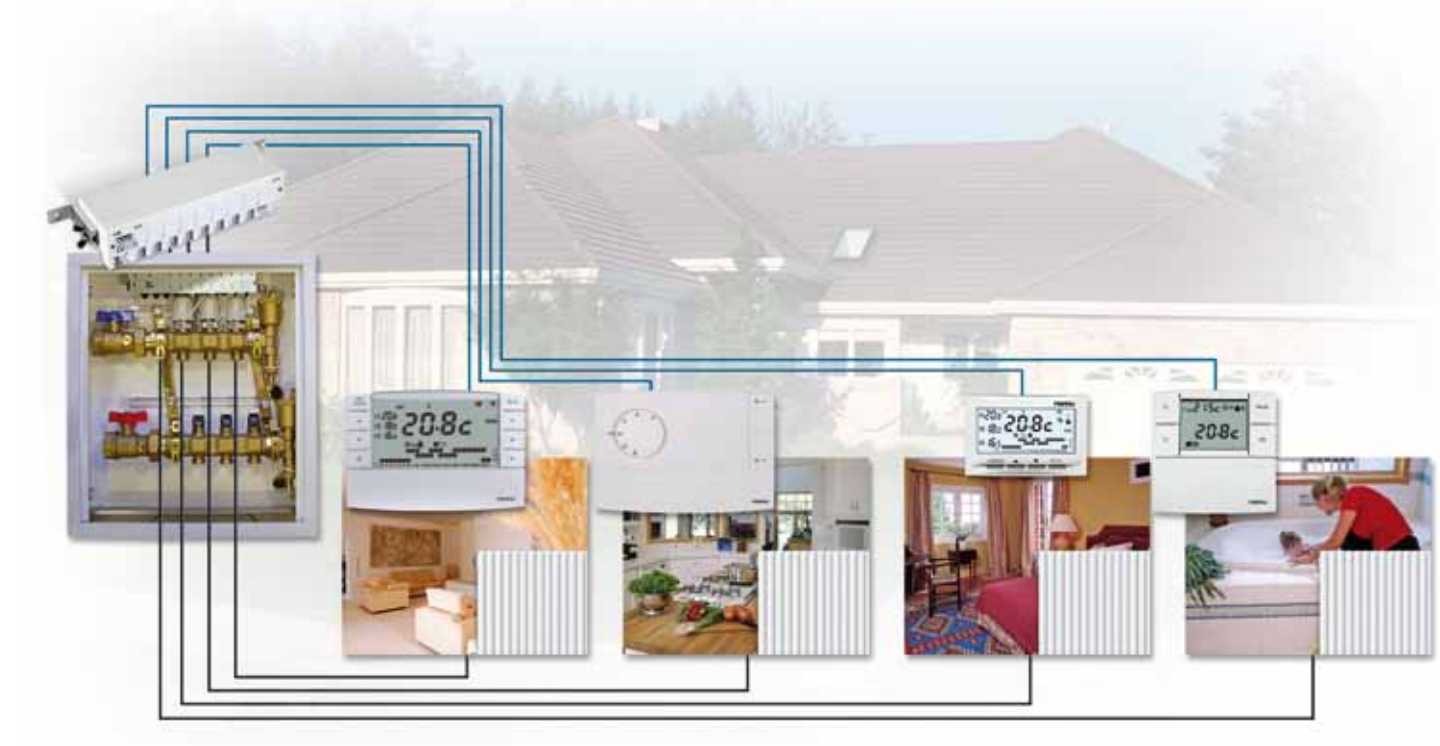
Remotely controlled SUM/WIN output
WINTER operation indicator LED
SUMMER operation indicator LED
ON/OFF pump
control indicator LED
Protection degree IP 30

1AC BP08230 — **8-zones control box** — **1**



Power supply 230V a.c. – 50Hz
Potential-free changeover contacts: 10A/250Va.c.
8 controllable zones
Output for active pump control with at least one open zone valve
Output controlled by a time switch

Remotely controlled SUM/WIN output
WINTER operation indicator LED
SUMMER operation indicator LED
ON/OFF pump
control indicator LED
Protection degree IP 30



CODE	DESCRIPTION	PACKAGE

1TM TE082

Electronic thermostat with adjustment on 2 temperature levels Comfort and Reduction, modular 2 DIN — **10**



Power supply 230V a.c. – 50Hz
1 potential-free changeover contact output: 16(3)A/250Va.c.
ON/OFF operation with adjustable differential switch 0.5-2.5°C
ON/OFF/ANTI-FREEZE control
Comfort/reduction/automatic remote selection control
2 graduated scales with adjustment index
2 temperature levels with continuous adjustment
Adjustable night reduction remote input
Set-point with mechanical temperature lock
Relay status indicator LED
Comfort indicator LED
Night reduction indicator LED
Equipped with NTC-type remote probe, as well as white and anthracite caps to be recessed in civil series blind plug
Dimensions (LxWxH) 35 x 60 x 128

1TM TE083

Electronic thermostat with ON/OFF/ANTI-FREEZE, modular 2 DIN — **10**



Power supply 230V a.c. – 50Hz
1 potential-free changeover contact output: 16(3)A/250Va.c.
ON/OFF operation with adjustable differential switch 0.5-2.5°C
ON/OFF/ANTI-FREEZE control
Graduated scale with adjustment index
2 temperature level with continuous adjustment
Adjustable night-time reduction remote input
Set-point with mechanical temperature lock
Relay status indicator LED
Night reduction indicator LED
Equipped with NTC-type remote probe, as well as white and anthracite caps to be recessed in civil series blind plug
Dimensions (LxWxH) 35 x 60 x 128

1TM TE084

Electronic thermostat with SUM/OFF/WIN, modular 2 DIN — **10**



Power supply 230V a.c. – 50Hz
1 potential-free changeover contact output: 16(3)A/250Va.c.
ON/OFF operation with adjustable differential switch 0.5-2.5°C
SUM/OFF/WIN control
Graduated scale with adjustment index
2 temperature level with continuous adjustment
Adjustable night reduction remote input
Set-point with mechanical temperature lock
Relay status indicator LED
Night reduction indicator LED
Equipped with NTC-type remote probe, as well as white and anthracite caps to be recessed in civil series blind plug
Dimensions (LxWxH) 35 x 60 x 128

1TM TE052/M

Electronic thermostat for switchboards, modular 2 DIN — **10**



For control-box cooling and anti-condensation

Power supply 230V a.c. – 50Hz
1 potential-free changeover contact output: 16(3)A/250Va.c.
ON/OFF operation with fixed differential switch 2°C
2 graduated scales with adjustment index
Cooling adjustment range +20°C / +60°C
Anticondensation adjustment range +0°C / +10°C
2 temperature levels with continuous adjustment
Supplied remote probe input
Relay status indicator LED
Damaged probe indicator LED
Equipped with NTC-type remote probe, as well as white and anthracite caps to be recessed in civil series blind plug
Dimensions (LxWxH) 35 x 60 x 128

CODE	DESCRIPTION	PACKAGE

1TM TE075 — **Electronic thermostat -30/+30°C, modular 2 DIN** — **10**



Power supply 230V a.c. – 50Hz
1 potential-free changeover contact output: 16(3)A/250Va.c.
ON/OFF operation with fixed differential switch 1°C
Graduated scale with adjustment index
1 temperature level with continuous adjustment
Remote probe input

Adjustment range -30°C / +30°C
Relay status indicator LED
Damaged probe indicator LED
Dimensions (LxWxH) 35 x 60 x 128

1TM TE076 — **Electronic thermostat -20/+40°C, modular 2 DIN** — **10**

Power supply 230V a.c. – 50Hz
1 potential-free changeover contact output: 16(3)A/250Va.c.
ON/OFF operation with fixed differential switch 1°C
Graduated scale with adjustment index
1 temperature level with continuous adjustment
Remote probe input

Adjustment range -20°C / +40°C
Relay status indicator LED
Damaged probe indicator LED
Dimensions (LxWxH) 35 x 60 x 128

1TM TE077 — **Electronic thermostat 0/+60°C, modular 2 DIN** — **10**

Power supply 230V a.c. – 50Hz
1 potential-free changeover contact output: 16(3)A/250Va.c.
ON/OFF operation with fixed differential switch 1°C
Graduated scale with adjustment index
1 temperature level with continuous adjustment
Remote probe input

Adjustment range 0°C / +60°C
Relay status indicator LED
Damaged probe indicator LED
Dimensions (LxWxH) 35 x 60 x 128

1TM TE078 — **Electronic thermostat +40/+100°C, modular 2 DIN** — **10**

Power supply 230V a.c. – 50Hz
1 potential-free changeover contact output: 16(3)A/250Va.c.
ON/OFF operation with fixed differential switch 1°C
Graduated scale with adjustment index
1 temperature level with continuous adjustment
Remote probe input

Adjustment range +40°C / +100°C
Relay status indicator LED
Damaged probe indicator LED
Dimensions (LxWxH) 35 x 60 x 128

ACCESSORIES

1TM STE01 — **PTC 100 temperature detection probe with 1.5m cable** — **1**



Detection probe with screened cable — 2 x 1.5 mm^2 - IP68

1TM STE01/4 — **PTC temperature detection probe with 4.0m cable** — **1**



Detection probe with screened cable — 2 x 1.5 mm^2 - IP68

CODE	DESCRIPTION	PACKAGE

1TC TB060 — **Contact thermostat for piping** — **10**



1 potential-free changeover contact output: 16(5)A/250Va.c.
ON/OFF operation with fixed differential switch 4/8°C
Graduated scale with adjustment index
1 temperature level with continuous adjustment

Installation in piping with supplied elastic strap
Adjustment range +30°C / +90°C
IP 20
Dimensions (LxWxH) 54 x 56 x 99

1TC TB065 — **Thermostat, immersion bulb** — **10**



1 potential-free changeover contact output: 16(5)A/250Va.c.
ON/OFF operation with fixed differential switch 4/8°C
Graduated scale with adjustment index
1 temperature level with continuous adjustment
Bulb for immersion installation

Adjustment range +30°C / +90°C
IP 20
Dimensions (LxWxH) 54 x 72 x 98.5

1TC TB071 — **Thermostat with safety limiting device** — **10**



1 potential-free changeover contact output: 16(5)A/250Va.c.
ON/OFF operation with fixed differential switch 4/8°C
Graduated scale with adjustment index
1 temperature level with continuous adjustment
Bulb for immersion installation

Adjustment range +30°C / +90°C
Safety limiting device T=100°C
IP 20
Dimensions (LxWxH) 108 x 56 x 98.5

1TC TB081 — **Thermostat for hot air generators** — **10**



1 potential-free changeover contact output: 16(5)A/250Va.c.
ON/OFF operation with fixed differential switch 4/8°C
Graduated scale with adjustment index
1 temperature level with continuous adjustment
Bulb for immersion installation

Adjustment range +30°C / +90°C
IP 20
Installation in hot air generators
Dimensions (LxWxH) 108 x 56 x 98.5

CODE	DESCRIPTION	PACKAGE

1TC TB088 — **Thermostat with external probe +4/+40°C** — **10**



1 potential-free changeover contact output: 16(5)A/250Va.c.
ON/OFF operation with fixed differential switch 4/8°C
Graduated scale with adjustment index

1 temperature level with continuous adjustment
Adjustment range +4°C / +40°C
Dimensions (LxWxH) 72 x 45.5 x 136

1TC TB090 — **Thermostat with external probe -5/+35°C** — **10**



1 potential-free changeover contact output: 16(5)A/250Va.c.
ON/OFF operation with fixed differential switch 4/8°C
Graduated scale with adjustment index

1 temperature level with continuous adjustment
Adjustment range -5°C / +35°C
IP 54
Dimensions (LxWxH) 72 x 45.5 x 136

1TC TB091 — **Thermostat with external probe +20/+60°C** — **10**



1 potential-free changeover contact output: 16(5)A/250Va.c.
ON/OFF operation with fixed differential switch 4/8°C
Graduated scale with adjustment index

1 temperature level with continuous adjustment
Adjustment range +20°C / +60°C
IP 54
Dimensions (LxWxH) 61 x 60 x 105

PRODUCTS FOR **CIVIL** INSTALLATION

GAS DETECTION SERIES ZEFIRO



47917MET/P - 47917GPL/P
48917MET/P - 48917GPL/P
50917MET/P - 50917GPL/P
51917MET/P - 51917GPL/P

GAS DETECTION WALL-MOUNTED



50916/CHCO - 50916/CO

PRODUCTS FOR **INDUSTRIAL** INSTALLATION

GAS DETECTION CONTROL UNITS 6-9 DIN MODULAR UNITS



2001 - 1 ZONE
2002 - 2 ZONES
2004 - 4 ZONES

GAS DETECTION CONTROL UNITS IN SWITCHBOARDS



4001 - 1 ZONE
4004 - 4 ZONES

GAS SENSORS

IP44 SENSORS



4100MET - 4100GPL

IP55 SENSORS



4200MET - 4200GPL - 4200MET/A - 4200GPL/A

IP55 SENSORS



4400CO - 4400CO/A

SOLENOID VALVES

Class "A" type-approved NC valves



EV005 - EV006 - EV007
EV008 - EV009 - EV010 - EV011

NO Normally Open valves



EV020 - EV021 - EV022 - EV023
EV024 - EV025 - EV026 - EV030
EV031 - EV032 - EV033 - EV034

NC Normally Closed valves



EV040 - EV041 - EV042 - EV043
EV044 - EV050 - EV051 - EV052
EV053 - EV054

Special voltages upon demand

WALL-MOUNTING KITS



50917MET/1.2 - 50917GPL/1.2
50917MET/3.4 - 50917GPL/3.4



CE marking standards:

LVD: 2006/95/EC	*CEI 216-8 (semi-recessed),* *EN 50194 (explosive gases),* *EN 50291 (toxic gases)*
EMC: 2004/108/EC	*EN 50270*



CE marking standards:

LVD: 2006/95/CE	*EN 161, EN 60730-1, EN 60335-1, EN 60529*
EMC: 2004/108/CE	*EN 55014-1, EN 55014-2*

CODE	DESCRIPTION	PACKAGE

1GA 47917MET/P — **Wall-mounted and/or Semi-recessed natural gas (CH4) detector with BUS output series "ZEFIRO"** — **4**



Power supply 230V a.c. 50-60Hz
1 potential-free changeover contact output: 8(2)A/250Va.c.
Microprocessor with fume selection program to prevent false alarms
Microprocessor with timer to signal product service every 5 years
Remote sensor recognition (BUS system)
Digital BUS output for signaller control (max 15)
Interconnection length max 800m (2x1.5 sq.mm)
Alarm memory
ON / TEST selector
Self-diagnosis test
Signalling buzzer 85dB at 1m
ON indicator LED
Fault indicator LED
Gas concentration LED on 3 signalling levels
Intervention level 5000 ppm 10% LIE
Wall-mounted IP 42
Dimensions (LxWxH) 120 x 40 x 82
Semi-recessed installation with accessory IP 40
Dimensions (LxWxH) 120 x 27.5 x 82

1GA 47917GPL/P — **Wall-mounted and/or Semi-recessed LPG gas detector with BUS output series "ZEFIRO"** — **4**



Power supply 230V a.c. 50-60Hz
1 potential-free changeover contact output: 8(2)A/250Va.c.
Microprocessor with fume selection program to prevent false alarms
Microprocessor with timer to signal product service every 5 years
Remote sensor recognition (BUS system)
Digital BUS output for signaller control (max 15)
Interconnection length max 800m (2x1.5 sq.mm)
Alarm memory
ON / TEST selector
Self-diagnosis test
Signalling buzzer 85dB at 1m
ON indicator LED
Fault indicator LED
Gas concentration LED on 3 signalling levels
Intervention level 1860 ppm 10% LIE
Wall-mounted IP 42
Dimensions (LxWxH) 120 x 40 x 82
Semi-recessed installation with accessory IP 40
Dimensions (LxWxH) 120 x 27.5 x 82

1GA 48917MET/P — **Wall-mounted and/or Semi-recessed natural gas (CH4) signaller with BUS input series "ZEFIRO"** — **4**



Power supply 230V a.c. 50-60Hz
Microprocessor with fume selection program to prevent false alarms
Microprocessor with timer to signal product service every 5 years
Digital BUS input
Alarm memory
ON / TEST selector
Self-diagnosis test
Signalling buzzer 85dB at 1m
ON indicator LED
Fault indicator LED
Gas concentration LED on 3 signalling levels
Intervention level 5000 ppm 10% LIE
Wall-mounted IP 42
Dimensions (LxWxH) 120 x 40 x 82
Semi-recessed installation with accessory IP 40
Dimensions (LxWxH) 120 x 27.5 x 82

1GA 48917GPL/P — **Wall-mounted and/or Semi-recessed LPG gas signaller with BUS input series "ZEFIRO"** — **4**



Power supply 230V a.c. 50-60Hz
Microprocessor with fume selection program to prevent false alarms
Microprocessor with timer to signal product servicel every 5 years
Digital BUS input
Alarm memory
ON / TEST selector
Self-diagnosis test
Signalling buzzer 85dB at 1m
ON indicator LED
Fault indicator LED
Gas concentration LED on 3 signalling levels
Intervention level 1860 ppm 10% LIE
Wall-mounted IP 42
Dimensions (LxWxH) 120 x 40 x 82
Semi-recessed installation with accessory IP 40
Dimensions (LxWxH) 120 x 27.5 x 82

CODE	DESCRIPTION	PACKAGE

1GA 50917MET/P — **Wall-mounted and/or Semi-recessed natural gas (CH4) detector with BUS output series "ZEFIRO"** — **8**



Power supply 230V a.c. 50-60Hz
1 potential-free changeover contact output: 8(2)A/250Va.c.
Signalling buzzer 85dB at 1m
ON indicator LED
Fault indicator LED
Gas presence indicator LED

Intervention level 5000 ppm 10% LIE
Wall-mounted IP 42
Dimensions (LxWxH) 120 x 40 x 82
Semi-recessed installation with accessory IP 40
Dimensions (LxWxH) 120 x 27.5 x 82

1GA 50917GPL/P — **Wall-mounted and/or Semi-recessed LPG gas detector with BUS output series "ZEFIRO"** — **8**



Power supply 230V a.c. 50-60Hz
1 potential-free changeover contact output: 8(2)A/250Va.c.
Signalling buzzer 85dB at 1m
ON indicator LED
Fault indicator LED
Gas presence indicator LED

Intervention level 1860 ppm 10% LIE
Wall-mounted IP 42
Dimensions (LxWxH) 120 x 40 x 82
Semi-recessed installation with accessory IP 40
Dimensions (LxWxH) 120 x 27.5 x 82

1GA 51917MET/P — **Wall-mounted and/or Semi-recessed natural gas (CH4) signaller series "ZEFIRO"** — **4**



Power supply 230V a.c. 50-60Hz
Signalling buzzer 85dB at 1m
ON indicator LED
Fault indicator LED
Gas presence indicator LED
Signalling level 5000 ppm 10% LIE

Wall-mounted IP 42
Dimensions (LxWxH) 120 x 40 x 82
Semi-recessed installation with accessory IP 40
Dimensions (LxWxH) 120 x 27.5 x 82

1GA 51917GPL/P — **Wall-mounted and/or Semi-recessed LPG gas signaller series "ZEFIRO"** — **4**



Power supply 230V a.c. 50-60Hz
Signalling buzzer 85dB at 1m
ON indicator LED
Fault indicator LED
Gas presence indicator LED
Signalling level 1860 ppm 10% LIE

Wall-mounted IP 42
Dimensions (LxWxH) 120 x 40 x 82
Semi-recessed installation with accessory IP 40
Dimensions (LxWxH) 120 x 27.5 x 82

1PA BSGA01 — **Base for Semi-recessed installation series "ZEFIRO"** — **10**

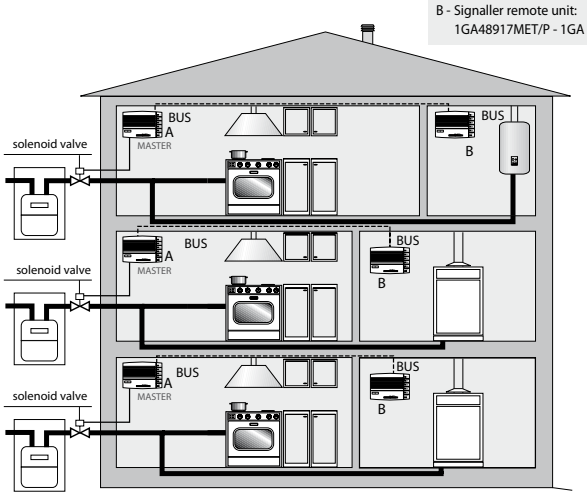
Base for semi-recessed installation in boxes: round and/or rectangular

Apartment protection with products equipped with bus system

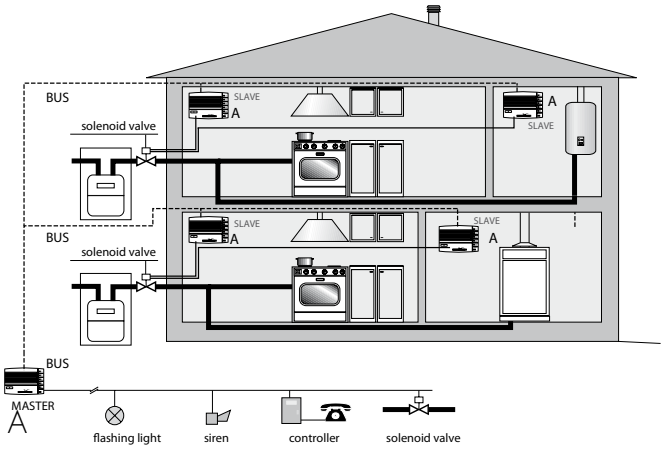
Example of installation with BUS

A - Main unit with valve control:
1GA 47917MET/P - 1GA 47917GPL/P

B - Signaller remote unit:
1GA48917MET/P - 1GA 48917GPL/P



Global building and apartment protection with products equipped with bus system



CODE	DESCRIPTION	PACKAGE
1GA 50916/CHCO	**Wall-mounted carbon monoxide (CO) and natural gas (CH4) detector**	**4**



The detector can detect two gases:
natural gas (CH4) and carbon monoxide (CO)
Intervention sensitivity:
- *natural gas at 10% of the lower explosion limit*
- *carbon monoxide, when the maximum allowed 300ppm CO concentration is exceeded, or rather in case low but damaging concentrations 30ppm for 2 hours persist for long periods in the premises.*

Power supply 230V a.c. 50-60Hz
2 potential-free changeover contacts
output: 5(2)A/250Va.c.
Natural gas catalytic sensor
Natural gas intervention level
5000 ppm 10% LIE
Semi-conductor sensor for CO
CO intervention level 30/300 (30ppm
after 2 hours – 300ppm immediately)

Signalling buzzer 85dB at 1m
ON indicator LED
Fault indicator LED
Gas presence indicator LED
(2 different)
Protection degree IP42
Dimensions (LxWxH) 185 x 50 x 86

1GA 50916/CO	**Wall-mounted carbon monoxide (CO) detector**	**4**



Intervention sensitivity to carbon monoxide, when the maximum allowed 300ppm CO concentration is exceeded, or rather in case low but damaging concentrations 30ppm for 2 hours persist for long periods in the premises.

Power supply 230V a.c. 50-60Hz
1 potential-free changeover contact
output: 5(2)A/250Va.c.
Semi-conductor sensor for CO
CO intervention level 30/300 (30ppm
after 2 hours – 300ppm immediately)

Signalling buzzer 85dB at 1m
ON indicator LED
Fault indicator LED
Gas presence indicator LED
Protection degree IP42
Dimensions (LxWxH) 185 x 50 x 86

WALL-MOUNTED GAS DETECTORS KIT, WITH SOLENOID VALVE

1GA 50917MET/1.2	**Wall-mounted natural gas detector kit with 1/2" NO solenoid valve**	**4**



Kit including
no. 1 1GA 50917MET/Pwith no. 1 1EV EV020

1GA 50917GPL/1.2	**Wall-mounted LPG gas detector kit with 1/2" NO solenoid valve**	**4**



Kit including
no. 1 1GA 50917GPL/P with no. 1 1EV EV020

1GA 50917MET/3.4	**Wall-mounted natural gas detector kit with 3/4" NO solenoid valve**	**4**



Kit including
no. 1 1GA 50917MET/P with no. 1 1EV EV021

1GA 50917GPL/3.4	**Wall-mounted LPG gas detector kit with 3/4" NO solenoid valve**	**4**



Kit including
no. 1 1GA 50917MET/P with no. 1 1EV EV021

CODE	DESCRIPTION	PACKAGE

1GA 2001 — **1-zone control unit for toxic and explosive gases - 6 DIN** — **1**



Microprocessor control unit manufactured to remotely control the presence of explosive or toxic gases by means of a probe. Precise self-diagnosis systems perform a continuous control of probe conditions and connection.

Power supply 230V a.c. 50Hz ±10%
Battery-operated secondary power supply 12V d.c. ±10%
Potential-free 3 contact outputs: 10A 250 V a.c. resistive - 5A 30V d.c. resistive
Pre-alarm 13% of LIE explosive gases and 200ppm for CO
Alarm 20% of LIE explosive gases and 300ppm for CO
1 connectable probe, type: catalytic, electrochemical cell, pellistor, semiconductor

Analogue input signal 4mA÷20mA
Max probe distance 100m
RESET and TEST controls
Signalling buzzer
Operation status indicator LED
Gas type indicator LED
Main alarm and pre-alarm indicator LED
Gas concentration indicator LED with thresholds
Dimensions (LxWxH) 105 x 58 x 90

1GA 2002 — **2-zones control unit for toxic and explosive gases - 6 DIN** — **1**



Microprocessor control unit manufactured to remotely control the presence of explosive and/or toxic gases by means of probes. Precise self-diagnosis systems perform a continuous control of probe conditions and connection.

Power supply 230V a.c. 50Hz ±10%
Battery-operated secondary power supply 12V d.c. ±10%
Potential-free 3 contact outputs: 10A 250 V a.c. resistive - 5A 30V d.c. resistive
Pre-alarm 13% of LIE explosive gases and 200ppm for CO
Alarm 20% of LIE explosive gases and 300ppm for CO
2 connectable probes, type: catalytic, electrochemical cell, pellistor, semiconductor

Analogue input signal 4mA÷20mA
Max probe distance 100m
RESET and TEST controls
Signalling buzzer
Operation status indicator LED
Gas type indicator LED
Main alarm and pre-alarm indicator LED
Gas concentration indicator LED with thresholds in each zone
Dimensions (LxWxH) 105 x 58 x 90

1GA 2004 — **4-zones control unit for toxic and explosive gases - 9 DIN** — **1**



Microprocessor control unit manufactured to remotely control the presence of explosive and/or toxic gases by means of probes. Precise self-diagnosis systems perform a continuous control of probe conditions and connection.

Power supply 230V a.c. 50Hz ±10%
Battery-operated secondary power supply 12V d.c. ±10%
Potential-free 3 contact outputs: 10A 250 V a.c. resistive - 5A 30V d.c. resistive
Pre-alarm 13% of LIE explosive gases and 200ppm for CO
Alarm 20% of LIE explosive gases and 300ppm for CO
4 connectable probes, type: catalytic, electrochemical cell, pellistor, semiconductor

Analogue input signal 4mA÷20mA
Max probe distance 100m
RESET and TEST controls
Signalling buzzer
Operation status indicator LED
Gas type indicator LED
Main alarm and pre-alarm indicator LED
Display that shows the gas concentration in sequence for each zone
Continuous 2" scanning in each probe
Dimensions (LxWxH) 158 x 58 x 90

CODE	DESCRIPTION	PACKAGE

1GA 4001 **1-zone control unit for toxic and explosive gases for switchboard** **1**



Microprocessor control unit manufactured to remotely control the presence of explosive or toxic gases by means of 1 probe. Precise self-diagnosis systems perform a continuous control of probe conditions and connection.

Power supply 230V a.c. 50Hz ±10%
Battery-operated secondary power supply 12V d.c. ±10%
Potential-free 4 contact outputs:
10A 250 V a.c. resistive - 5A 30V d.c. resistive
Pre-alarm 8% of LIE explosive gases and 120ppm for CO
Pre-alarm 13% of LIE explosive gases and 200ppm for CO
Alarm 20% of LIE explosive gases and 300ppm for CO
1 connectable probe, type: catalytic, electrochemical cell, pellistor, semiconductor
Analogue input signal 4mA÷20mA
Max probe distance 100m
RESET and TEST controls
Signalling buzzer
Operation status indicator LED
Gas type indicator LED
Main alarm and pre-alarm indicator LED
Gas concentration indicator LED with thresholds
Protection degree IP44
Dimensions (LxWxH) 144 x 110 x 144

1GA 4004 **4-zones control unit for toxic and explosive gases for switchboard** **1**



Microprocessor control unit manufactured to remotely control the presence of explosive and/or toxic gases by means of probes. Precise self-diagnosis systems perform a continuous control of probe conditions and connection.

Power supply 230V a.c. 50Hz ±10%
Battery-operated secondary power supply 12V d.c. ±10%
Potential-free 4 contact outputs:
10A 250 V a.c. resistive - 5A 30V d.c. resistive
Potential-free 1 contact outputs:
Outputs 3 polarized NO contacts:
10A 250 V a.c. resistive - 5A 30V d.c. resistive
Pre-alarm 8% of LIE explosive gases and 120ppm for CO
Pre-alarm 13% of LIE explosive gases and 200ppm for CO
Alarm 20% of LIE explosive gases and 300ppm for CO
4 connectable probes, type: catalytic, electrochemical cell, pellistor, semiconductor
Analogue input signal 4mA÷20mA Max probe distance 100m
RESET and TEST controls
Signalling buzzer
Operation status indicator LED
Gas type indicator LED
Main alarm and pre-alarm indicator LED
Display that shows the gas concentration in sequence for each zone
Continuous 2" scanning in each probe
Protection degree IP44
Dimensions (LxWxH) 144 x 110 x 144

CODE	DESCRIPTION	PACKAGE

1GA 4100MET — **CH4 Sensor - IP44** — **1**



Power supply 12-24V d.c. +/- 10%
Catalytic sensor for NATURAL gas having a duration of 5 years
Detector measurement field 0÷20% LIE
Analogue output signal 4mA÷20mA
Protection degree IP44
Max control unit distance 100m

Probe body material: self-extinguishing ABS
Working temperature limit -10°C +40°C
Power supply indicator LED
Dimensions (LxWxH) 110x58x75

1GA 4100GPL — **LPG Sensor - IP44** — **1**



Power supply 12-24V d.c. +/- 10%
Catalytic sensor for LPG gas having a duration of 5 years
Detector measurement field 0÷20% LIE
Analogue output signal 4mA÷20mA
Protection degree IP44
Max control unit distance 100m

Self-extinguishing ABS material
Working temperature limit -10°C +40°C
Power supply indicator LED
Dimensions (LxWxH) 110x58x75

1GA 4200MET — **CH4 Sensor - IP55** — **1**



Microprocessor probe with AUTOMATIC calibration and self-diagnosis to adapt to harsh environments and variable temperatures to prevent false alarms due to irregular events.

Power supply 12-24V d.c. +/- 10%
Catalytic sensor for NATURAL gas having a duration of 5 years
Detector measurement field 0÷20% LIE
Analogue output signal 4mA÷20mA
Protection degree IP 55
Max control unit distance 100m

Probe body material: self-extinguishing ABS
Working temperature limit -10°C +40°C
Power supply indicator LED
Dimensions (LxWxH) 75x58x110

1GA 4200GPL — **LPG Sensor - IP55** — **1**



Microprocessor probe with AUTOMATIC calibration and self-diagnosis to adapt to harsh environments and variable temperatures to prevent false alarms due to irregular events.

Power supply 12-24V d.c. +/- 10%
Catalytic sensor for LPG gas having a duration of 5 years
Detector measurement field 0÷20% LIE
Analogue output signal 4mA÷20mA
Protection degree IP 55
Max control unit distance 100m

Probe body material: self-extinguishing ABS
Working temperature limit -10°C +40°C
Power supply indicator LED Dimensions (LxWxH) 75x58x110

CODE	DESCRIPTION	PACKAGE

1GA 4200MET/A — **CH4 Sensor - IP55 casing made in die-cast aluminium** — **1**



Microprocessor probe with AUTOMATIC calibration and self-diagnosis to adapt to harsh environments and variable temperatures to prevent false alarms due to irregular events.

Power supply 12-24V d.c. +/- 10%
Catalytic sensor for NATURAL gas having a duration of 5 years
Detector measurement field 0÷20% LIE
Analogue output signal 4mA÷20mA
Protection degree IP 55
Max control unit distance 100m
Probe body material: aluminium
Working temperature limit -10°C +40°C
Power supply indicator LED
Dimensions (LxWxH) 158x75x100

1GA 4200GPL/A — **LPG Sensor - IP55 casing made in die-cast aluminium** — **1**



Microprocessor probe with AUTOMATIC calibration and self-diagnosis to adapt to harsh environments and variable temperatures to prevent false alarms due to irregular events.

Power supply 12-24V d.c. +/- 10%
Catalytic sensor for LPG gas having a duration of 5 years
Detector measurement field 0÷20% LIE
Analogue output signal 4mA÷20mA
Protection degree IP 55
Max control unit distance 100m
Probe body material: aluminium
Working temperature limit -10°C +40°C
Power supply indicator LED
Dimensions (LxWxH) 158x75x100

1GA 4400CO — **CO Sensor - IP55** — **1**



Microprocessor probe to detect TOXIC GASES, such as carbon monoxide, with self-diagnosis. It is used when the maximum allowed 300ppm CO concentration is exceeded, or rather in case low but damaging concentrations 30ppm for 2 hours persist for long periods in the premises.

Power supply 12-24V d.c. +/- 10%
Electrochemical cell
Catalytic sensor for LPG gas having a duration of 5 years
Detector measurement field 0÷20% LIE
Analogue output signal 4mA÷20mA
Protection degree IP 55
Max control unit distance 100m
Probe body material: aluminium
Working temperature limit -10°C +40°C
Power supply indicator LED
Dimensions (LxWxH) 110x58x75

1GA 4400CO/A — **CO Sensor - IP55 casing made in die-cast aluminium** — **1**



Microprocessor probe to detect TOXIC GASES, such as carbon monoxide, with self-diagnosis. It is used when the maximum allowed 300ppm CO concentration is exceeded, or rather in case low but damaging concentrations 30ppm for 2 hours persist for long periods in the premises.

Power supply 12-24V d.c. +/- 10%
Electrochemical cell
Catalytic sensor for LPG gas having a duration of 5 years
Detector measurement field 0÷20% LIE
Analogue output signal 4mA÷20mA
Protection degree IP 55
Max control unit distance 100m
Probe body material: aluminium
Working temperature limit -10°C +40°C
Power supply indicator LED
Dimensions (LxWxH) 158x75x100

CODE	DESCRIPTION	PACKAGE

Perry gas solenoid valves can be used for working pressures up to max 5000 mbar. Equipped with electric connector.

Type of intercepted gas natural gas – LPG
Type of reset manual – automatic



1EV EV005 — **Solenoid valve NC 1/2", threaded type-approved in class "A" 230V a.c.** — **1**



Power supply 230V a.c. +/-10% — Normally closed, Automatic reset

1EV EV006 — **Solenoid valve NC 3/4", threaded type-approved in class "A" 230V a.c.** — **1**

Power supply 230V a.c. +/-10% — Normally closed, Automatic reset

1EV EV007 — **Solenoid valve NC 1", threaded type-approved in class "A" 230V a.c.** — **1**

Power supply 230V a.c. +/-10% — Normally closed, Automatic reset

1EV EV008 — **Solenoid valve NC 1" 1/2, threaded type-approved in class "A" 230V a.c.** — **1**

Power supply 230V a.c. +/-10% — Normally closed, Automatic reset

1EV EV009 — **Solenoid valve NC 2", threaded type-approved in class "A" 230V a.c.** — **1**

Power supply 230V a.c. +/-10% — Normally closed, Automatic reset

1EV EV010 — **Solenoid valve NC DN 65, flanged type-approved in class "A" 230V a.c.** — **1**

Power supply 230V a.c. +/-10% — Normally closed, Automatic reset

1EV EV011 — **Solenoid valve NC DN 80, flanged type-approved in class "A" 230V a.c.** — **1**

Power supply 230V a.c. +/-10% — Normally closed, Automatic reset

CODE	DESCRIPTION		PACKAGE
1EV EV020	**Solenoid valve NO 1/2", threaded 230V a.c.**		**1**
	Power supply 230V a.c.	Normally open Manual reset	
1EV EV021	**Solenoid valve NO 3/4", threaded 230V a.c.**		**1**
	Power supply 230V a.c.	Normally open Manual reset	
1EV EV022	**Solenoid valve NO 1", threaded 230V a.c.**		**1**
	Power supply 230V a.c.	Normally open Manual rreset	
1EV EV023	**Solenoid valve NO 1"1/2, threaded 230V a.c.**		**1**
	Power supply 230V a.c.	Normally open Manual reset	
1EV EV024	**Solenoid valve NO 2", threaded 230V a.c.**		**1**
	Power supply 230V a.c.	Normally open Manual reset	
1EV EV025	**Solenoid valve NO DN 65, threaded 220V a.c.**		**1**
	Power supply 230V a.c.	Normally open Manual reset	
1EV EV026	**Solenoid valve NO DN 80, threaded 220V a.c.**		**1**
	Power supply 230V a.c.	Normally open Manual reset	
1EV EV030	**Solenoid valve NO 1/2", threaded 12V a.c.**		**1**
	Power supply 230V a.c.	Normally open Manual reset	
1EV EV031	**Solenoid valve NO 3/4", threaded 12V a.c.**		**1**
	Power supply 12V a.c.	Normally open Manual reset	
1EV EV032	**Solenoid valve NO 1", threaded 12V a.c.**		**1**
	Power supply 12V a.c.	Normally open Manual reset	
1EV EV033	**Solenoid valve NO 1"1/2, threaded 12V a.c.**		**1**
	Power supply 12V a.c.	Normally open Manual reset	
1EV EV034	**Solenoid valve NO 2", threaded 12V a.c.**		**1**
	Power supply 12V a.c.	Normally open Manual reset	

CODE	DESCRIPTION		PACKAGE
1EV EV040	**Solenoid valve NC 1/2", threaded 230V a.c.**		**1**
	Power supply 230V a.c. +/-10%	Normally closed Manual reset	
1EV EV041	**Solenoid valve NC 3/4", threaded 230V a.c.**		**1**
	Power supply 230V a.c. +/-10%	Normally closed Manual reset	
1EV EV042	**Solenoid valve NC 1", threaded 230V a.c.**		**1**
	Power supply 230V a.c. +/-10%	Normally closed Manual reset	
1EV EV043	**Solenoid valve NC 1"1/2, threaded 230V a.c.**		**1**
	Power supply 230V a.c. +/-10%	Normally closed Manual reset	
1EV EV044	**Solenoid valve NC 2", threaded 230V a.c.**		**1**
	Power supply 230V a.c. +/-10%	Normally closed Manual reset	
1EV EV050	**Solenoid valve NC 1/2", threaded 12V a.c.**		**1**
	Power supply 12V a.c.	Normally closed Manual reset	
1EV EV051	**Solenoid valve NC 3/4", threaded 12V a.c.**		**1**
	Power supply 12V a.c.	Normally closed Manual reset	
1EV EV052	**Solenoid valve NC 1", threaded 12V a.c.**		**1**
	Power supply 12V a.c.	Normally closed Manual reset	
1EV EV053	**Solenoid valve NC 1"1/2, threaded 12V a.c.**		**1**
	Power supply 12V a.c.	Normally closed Manual reset	
1EV EV054	**Solenoid valve NC 2", threaded 12V a.c.**		**1**
	Power supply 12V a.c.	Normally closed Manual reset	

DIGITAL TIME SWITCHES

DIGITAL MENU DRIVEN



3090 - 3290 - 3091 - 3291
5090 - 5290 - 5091 - 5291
5091S - 5291S

DIGITAL



0080 - 0081 - 0280 - 0281
1080 - 1081 - 1280 - 1281

DIGITAL ASTRONOMICAL



4090 - 4290

DIGITAL 1 DIN



0070 - 0071
1070 - 1071

DIGITAL WITH TAPPETS 2 DIN



0022/D15 - 0024/D15

CE marking standards:

LVD: 2006/95/CE — ***EN 60730-1***, *EN 60730-2-7*
EMC: 2004/108/CE — ***EN 60730-1***, *EN 60730-2-7*

ELECTROMECHANICAL TIME SWITCHES WITH TAPPETS

72 X 72



0012 - 0014 - 0015

1 - 2 - 4 DIN



0171 - 0021 - 0022 - 0024
0135 - 0136

PLUG-IN



0055 - 0056

CE marking standards:

LVD: 2006/95/CE — ***EN 60730-1***, *EN 60730-2-7*
EMC: 2004/108/CE — ***EN 60730-1***, *EN 60730-2-7*

PHOTOCELL LIGHTING CONTROL SWITCHES

FOR OUTDOOR



7242 - 7243 - 7245

DIN MODULAR



7051 - 7052 - 7053

CE marking standards:

LVD: 2006/95/CE — ***EN 60669-1***, *EN 60669-2-1*
EMC: 2004/108/CE — *EN 60669-2-1*

DIGITAL
WITH TAPPETS - 72 X 72



0012D15 - 0016D15

MODULES
INDUSTRIAL TYPE



3091M - 3291M
5091M - 5291M
1080/M - 1280/M - 1081/M - 1281/M
0022/D15M - 0024/D15M
0012D15/M230 - 0016D15/M230

CE marking standards:

LVD: 2006/95/CE — ***EN 60730-1**, EN 60730-2-7*
EMC: 2004/108/CE — ***EN 60730-1**, EN 60730-2-7*

ACCESSORIES



RXDCF77 **KTMP2**
RXGPS01 **KTMP4**

STAIRCASE TIMERS

STAIRCASE TIMERS



1051 - 1061 - 1063 - 1063.2 - 1065.2 - 1066

CE marking standards:

LVD: 2006/95/CE — ***EN 60669-1**, EN 60669-2-3, EN 60669-2-1*
EMC: 2004/108/CE — *EN 60669-2-1*

MOVEMENT DETECTORS

FOR INDOOR AND OUTDOOR



SP001 - SP002 - SP005 - SP010 - SP015 - SP020

CE marking standards:

LVD: 2006/95/CE — ***EN 60669-1**, EN 60669-2-1*
EMC: 2004/108/CE — *EN 55015, EN61547, EN 61000-3-2, EN 61000-3-3*

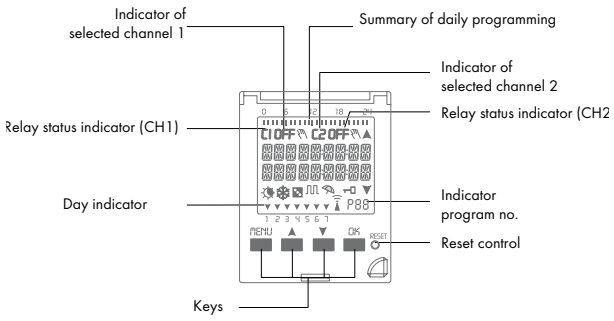
CONTROL EQUIPMENT
YEARLY - MONTHLY - WEEKLY - DAILY TIME SWITCHES WITH MENU DRIVEN PROGRAMMING

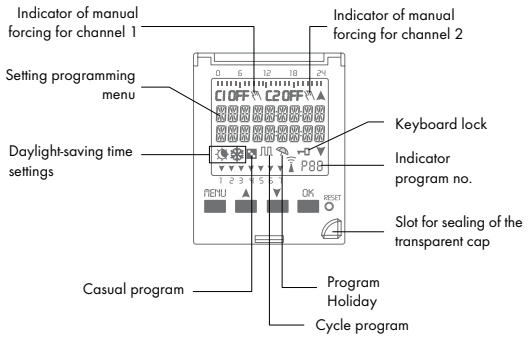


- Menu driven programming with instruction reading in the backlit display
- Models with one or two relay control outputs
- Intelligent relay driving that increases load values and the duration of the relay and the connected load "zero crossing"
- External inputs matched with the inputs for remote manual setting
- Calendar: year - month - day - hour and minutes
- Programming keys: 1 menu key - 2 setting and menu scrolling keys 1 data confirmation key
- Multilingual menu: Italian - English - German - French - Spanish - Portuguese – Swedish - Dutch - Russian - Polish - Greek
- Program types: Standard, Holiday, Random and Cyclical
- Total 64 freely settable programs
- Holiday: different periods can be programmed during the year
- ON/OFF programming minimum time: 1 second
- Quick program deletion
- Simplified temporary or permanent manual activation/deactivation
- Date/time setting with automatic standard time/daylight saving time change
- Hour counter function for monitoring load operating hours
- Maintenance programming of the connected loads
- Product warranty management
- Keyboard lock
- White-colour backlit display (fixed ON/fixed OFF/timed deactivation)
- Display backlighting management: white colour
- LITHIUM eco friendly battery, duration 6 years
- EEPROM memory for program saving
- High-precision quartz mechanism: ≤ ± 0.5 sec/day

Note: all items can be installed on the rear of the switchboard by means of optional accessories (KTMP2)

DISPLAY LEGEND AND KEY FUNCTIONS

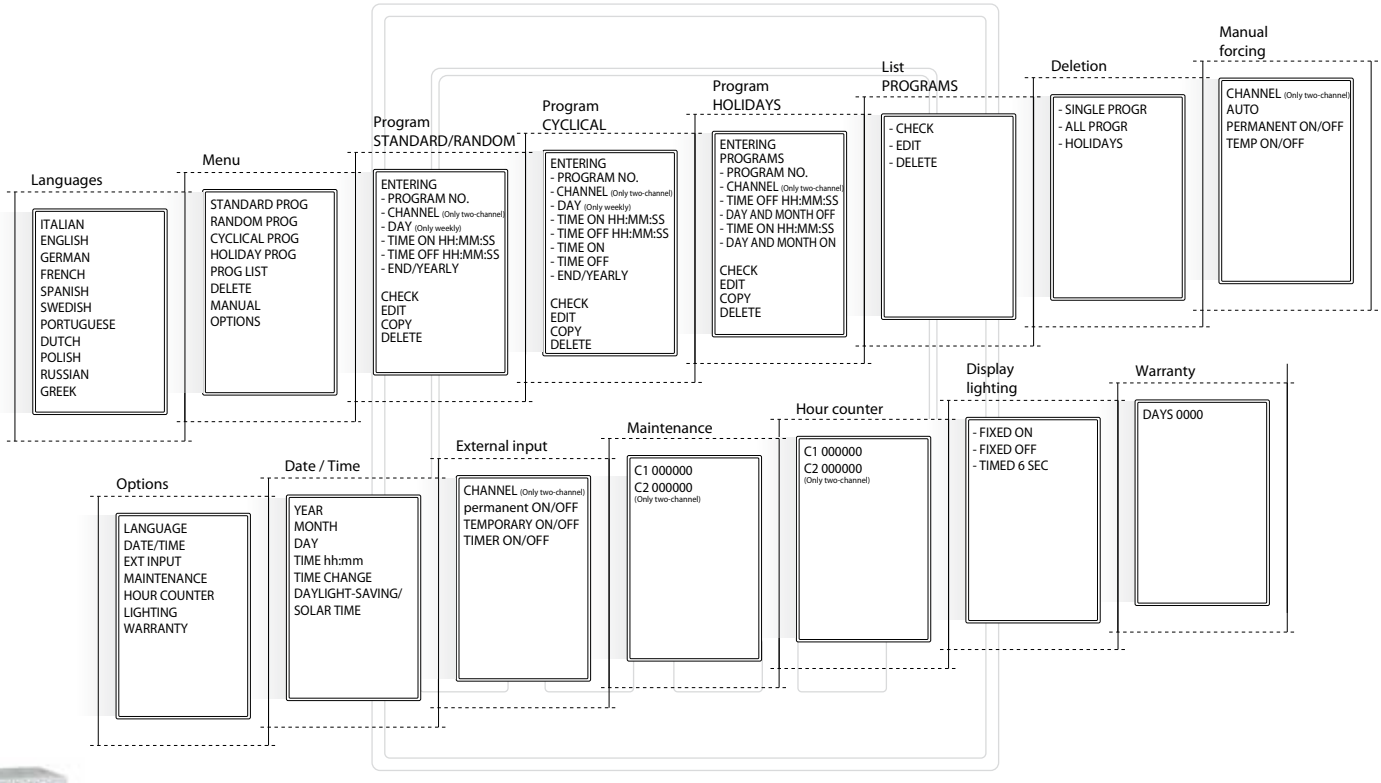




TECHNICAL SPECIFICATIONS

Power supply voltage	230V c.a. 50 - 60Hz
Contact rated data	potential-free NC contact 16(2) A / 250V a.c. Limited current NO contact zero crossing 16(10) A / 250V a.c
Max program number (ON-OFF)	64 (matchable in blocks of days)
ON - OFF minimum connection time	1 second
Displays	LCD display, 1" 1/3 backlit
Max. commutable power	3500 VA (for individual contact)
Power: Incandescent LPs	2300 W
Power: Fluorescent tube LPs, not compensated	1000 W
Power: Parallely comp. fluorescent tube LPs	500W (tot capacity 70 microF)
Power: Compact, fluorescent LPs	600W
Max cross-section of wires to terminals	6 mm^2
Protection degree (IP)	IP 20 - IP 40 (on the rear of the switchboard)
Type of output	terminals with captive screw
Insulation class	II ⧈
ON/OFF relay signalling	ON/OFF in LCD display
Charge reserve	6 years
Type of reserve	LITHIUM battery
Time tolerance	+ - 0.5 sec/day
Operating temperature limits	0°C +50°C
Storing temperature	-10°C +65°C
Type of installation	DIN guide/on the rear of the switchboard
Case	thermoplastic - grey RAL 7035
Type of use	civil / tertiary / industrial
Controls	multifunction keys (menu programming) confirmation button
Clock setting accuracy	digital for hours / minutes
Daylight saving time change	automatic
Programming	with menus - programs protected in EEPROM
Dimensions (LxWxH)	35 x 60 x 90

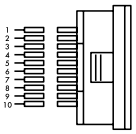
DISPLAY OF THE PROGRAMMING MENU





CODE	DESCRIPTION	PACKAGE
1IO 3090	**Menu driven yearly-daily time switch 1 channel - 2 DIN**	**12**
	1 potential-free changeover contact	
1IO 3290	**Menu driven yearly-daily time switch 2 channels - 2 DIN**	**12**
	2 potential-free changeover contacts	
1IO 3091	**Menu driven yearly-weekly time switch 1 channel - 2 DIN**	**12**
	1 potential-free changeover contact	
1IO 3291	**Menu driven yearly-weekly time switch 2 channels - 2 DIN**	**12**
	2 potential-free changeover contacts	





Legend:
Pin 1: GND earth
Pin 2: External Input signal Input 2
Pin 3: Zero crossing signal input 2
Pin 4: External Input signal Input 1
Pin 5: GND earth
Pin 6: Zero crossing signal input 1
Pin 7: Relay output 2
Pin 8: Relay output 1
Pin 9: +Vbat, Battery power supply 3V
Pin 10: +Vpp, Power supply 3.6V

1IO 3091M	**Menu driven yearly-weekly time switch module 1 channel - 2 DIN**	**1**
1IO 3291M	**Menu driven yearly-weekly time switch module 2 channels - 2 DIN**	**1**

CONTROL EQUIPMENT
YEARLY - MONTHLY - WEEKLY - DAILY TIME SWITCHES WITH MENU DRIVEN PROGRAMMING KEY AND MEMORY KEY

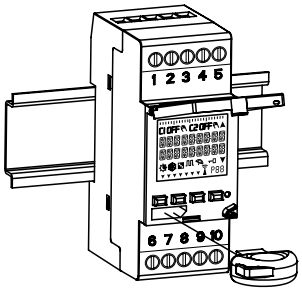




- Menu driven programming with instruction reading in the backlit display
- Models with one or two relay control outputs
- Intelligent relay driving that increases load values and the duration of the relay and the connected load "zero crossing"
- External inputs matched with the inputs for remote manual setting
- External memory key for execution and loading of the programs with possibility to download/upload programs
- Calendar: year - month - day - hour and minutes
- Programming keys: 1 menu key - 2 setting and menu scrolling keys 1 data confirmation key
- Multilingual menu: Italian - English - German - French - Spanish - Portuguese – Swedish - Dutch - Russian - Polish - Greek
- Program types: Standard, Holiday, Random and Cyclical
- Total 64 freely settable programs
- Holiday: different periods can be programmed during the year
- ON/OFF programming minimum time: 1 second
- Quick program deletion
- Simplified temporary or permanent manual activation/deactivation
- Date/time setting with automatic standard time/daylight saving time change
- Hour counter function for monitoring load operating hours
- Maintenance programming of the connected loads
- Product warranty management
- Keyboard lock
- White-colour backlit display (fixed ON/fixed OFF/timed deactivation)
- Display backlighting management: white colour
- LITHIUM eco friendly battery, duration 6 years
- EEPROM memory for program saving
- High-precision quartz mechanism: ≤ ± 0.5 sec/day

Note: all items can be installed on the rear of the switchboard by means of optional accessories (KTMP2)

EXTERNAL MEMORY KEY





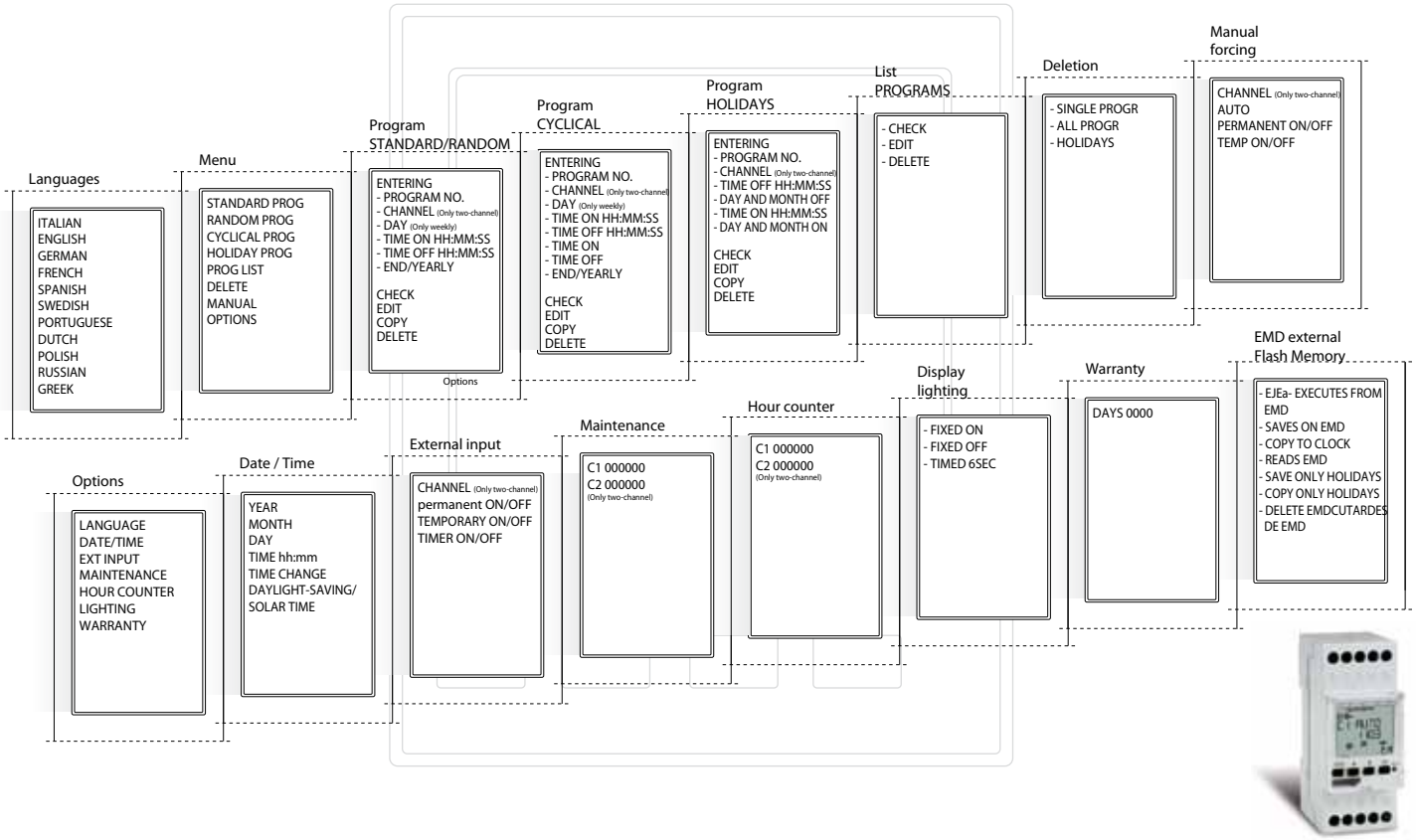
The external memory key allows:
- executing the programs being recorded in the key
- transfer of the programs from a time switch to the key and vice versa
- reading of the programs in the key

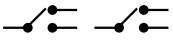
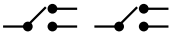


TECHNICAL SPECIFICATIONS

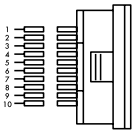
Power supply voltage	230V c.a. 50 - 60Hz
Contact rated data	potential-free NC contact 16(2) A / 250V a.c. Limited current NO contact zero crossing 16(10) A / 250V a.c.
Max program number (ON-OFF)	64 (matchable in blocks of days)
ON - OFF minimum connection time	1 second
Displays	LCD display, 1" 1/3 backlit
Max. commutable power	3500 VA (for individual contact)
Power: Incandescent LPs	2300 W
Power: Fluorescent tube LPs, not compensated	1000 W
Power: Parallely comp. fluorescent tube LPs	500W (tot capacity 70 microF)
Power: Compact, fluorescent LPs	600W
Max cross-section of wires to terminals	6 mm^2
Protection degree (IP)	IP 20 - IP 40 (on the rear of the switchboard)
Type of output	terminals with captive screw
Insulation class	II ⧈
ON/OFF relay signalling	ON/OFF in LCD display
Charge reserve	6 years
Type of reserve	LITHIUM battery
Time tolerance	+ - 0.5 sec/day
Operating temperature limits	0°C +50°C
Storing temperature	-10°C +65°C
Type of installation	DIN guide / on the rear of the switchboard
Case	thermoplastic - grey RAL 7035
Type of use	civil / tertiary / industrial
Controls	multifunction keys (menu programming) confirmation button
Clock setting accuracy	digital for hours / minutes
Daylight saving time change	automatic
Programming	with menus - programs protected in EEPROM
Dimensions (LxWxH)	35 x 60 x 90

DISPLAY OF THE PROGRAMMING MENUS



CODE	DESCRIPTION	PACKAGE
1IO 5090	**Menu driven yearly-daily time switch with programming key 1 channel - 2 DIN**	**12**
	1 potential-free changeover contact 	
1IO 5290	**Menu driven yearly-daily time switch with programming key 2 channels - 2 DIN**	**12**
	2 potential-free changeover contacts 	
1IO 5091	**Menu driven yearly-weekly time switch with programming key 1 channel - 2 DIN**	**12**
	1 potential-free changeover contact 	
1IO 5291	**Menu driven yearly-weekly time switch with memory key 2 channels - 2 DIN**	**12**
	2 potential-free changeover contacts 	





Legend:
Pin 1: GND earth
Pin 2: External Input signal Input 2
Pin 3: Zero crossing signal input 2
Pin 4: External Input signal Input 1
Pin 5: GND earth
Pin 6: Zero crossing signal input 1
Pin 7: Relay output 2
Pin 8: Relay output 1
Pin 9: +Vbat, Battery power supply 3V
Pin 10: +Vpp, Power supply 3.6V

1IO 5091M	**Menu driven yearly-weekly time switch module with programming key 1 channel - 2 DIN**	**1**
1IO 5291M	**Menu driven yearly-weekly time switch module with programming key 2 channels - 2 DIN**	**1**
1PR EMD01	**Additional "EMD" programming key**	**1**
	External memory key to execute, download and load the programs	



Products that can be connected with DCF or GPS time signal receivers.
A receiver can accept MAX 10 synchronized devices by means of a BUS connection.

CODE	DESCRIPTION	PACKAGE
1IO 5091S	**Menu Driven yearly-weekly time switch with memory key - synchronized with DCF and/or GPS time signal 1 channel - 2 DIN**	**1**
1IO 5291S	**Menu Driven yearly-weekly time switch with memory key - synchronized with DCF and/or GPS time signal - 2 DIN**	**1**





The accuracy of time synchronization together with the minimum programming terms (seconds) allow the installation of the product for the activation of activity beginning/end signals in: schools, factories, offices, etc.

DCF

The DCF77 station, which is managed by the Physikalisch-Technische Bundesanstalt, is widely used in various countries. The abbreviation means: D=Deutschland (Germany), C=long-wave signal, F=Frankfurt, 77=Frequency equalling 77.5 kHz. The time reference is kept by an atomic clock and spread from Mainflingen, about 25 km far from Frankfurt. The signal can be received from a 2000 km distance. Two independent 50 kW transmitters are used to assure service continuity.

CODE	DESCRIPTION	PACKAGE
1PA RXDCF77	**Time signal receiver from Frankfurt for synchronized time switches**	**1**



Power supply 230V a.c. 50/60Hz
Wall-mounted or pole installation
BUS output signal
Protection degree IP65
Wiring with sheathed cable
diameter 7-11mm
Anti-UV opaline case
wiring with cables up to 2.5 sq.mm
Can be connected to max no. 10
time switches
LED intervention signalling
Dimensions (LxWxH) 72x37.5x147



GPS

Some clocks receive the time by the Global Positioning System, which offers a more precise value with respect to terrestrial transmissions. The GPS system combines the time supplied by different atomic clocks installed in system satellites and a network of terrestrial stations; it establishes and corrects errors. As time is simultaneously obtained by different sources, the clock can automatically compensate propagation delays and other problems, by reaching an accuracy that is lower than a microsecond in optimal conditions.

CODE	DESCRIPTION	PACKAGE
1PA RXGPS01	**Satellite GPS time signal receiver for synchronized time switches**	**1**



Power supply 230V a.c. 50/60Hz
Wall-mounted or pole installation
BUS output signal
Protection degree IP65
Wiring with sheathed cable
diameter 7-11mm
Anti-UV opaline case
wiring with cables up to 2.5 sq.mm
Can be connected to max no. 10
time switches
LED intervention signalling
Dimensions (LxWxH) 72 x 37.5 x 147



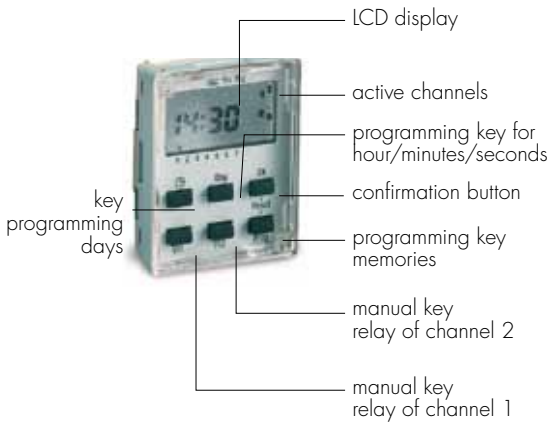


Digital models - 2 DIN Modules

- ON/OFF minimum programming: 1 second
- Programming: from 1" to 99"
  from 1' to 59'
  from 1hto 24h
  from 1d to 7dd for days and/or blocks of days
- Programming of interventions at the turn of midnight by using a single program
- Automatic Standard Time change
- EEPROM memory to keep the programs over the charge reserve
- Models with automatic standard time/daylight saving time change

Note: all items can be installed on the rear of the switchboard by means of optional accessories (KTMP2)

DISPLAY LEGEND AND KEY FUNCTIONS



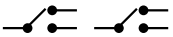
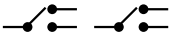
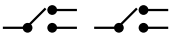
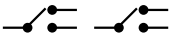
SIMPLIFIED PROGRAMMING

Key	
PROGR	= programming input
	= selection of the desired channel 1 or 2
DAY	= selection of day / group of days
	= data entering for ON / OFF status
PROGR	= programming end

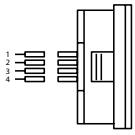
Manual forcing is possible permanent ON / OFF status

TECHNICAL SPECIFICATIONS

Power supply voltage	230V c.a. 50 - 60Hz
Contact rated data	16(2) A / 250V c.a.
Max program number (ON-OFF)	20 (matchable in blocks of days)
ON - OFF minimum connection time	1 second
Displays	in the LCD display 1"
Max commutable power	3500 VA (for individual contact)
Power: Incandescent LPs	2300 W
Power: Fluorescent tube LPs, not compensated	1000 W
Power: Parallely comp. fluorescent tube LPs	500W (tot capacity 70 microF)
Power: Compact, fluorescent LPs	600W
Max cross-section of wires to terminals	2.5 sq.mm
Protection degree (IP)	IP 20 IP 30 (with cover) IP 40 (on the rear of the switchboard
Type of output	terminals with captive screw
Insulation class	II ⧈
ON/OFF relay signalling	ON/OFF in LCD display
Charge reserve	max 15 days
Type of reserve	NiMH rechargeable battery
Time tolerance	+ - 0.5 sec/day
Operating temperature limits	0°C +50°C
Storing temperature	-10°C +50°C
Type of installation	DIN guide / wall-mounted / on the rear of the switchboard
Case	thermoplastic - grey RAL 7035
Type of use	civil / tertiary / industrial
Controls	programming keys ON/OFF manual function key
Clock setting accuracy	digital for hours / minutes
Automatic daylight saving	for 4 geographical areas
Digital programming	for hours / minutes / seconds
Dimensions (LxWxH)	35 x 60 x 128

CODE	DESCRIPTION	PACKAGE
1IO 0080	**Digital daily time switch 1 channel - 2 DIN**	**12**
	1 potential-free changeover contact 	
1IO 0280	**Digital daily time switch 2 channels - 2 DIN**	**12**
	2 potential-free changeover contacts 	
1IO 0081	**Digital weekly time switch 1 channel - 2 DIN**	**12**
	1 potential-free changeover contact 	
1IO 0281	**Digital weekly time switch 1 channel - 2 DIN**	**12**
	2 potential-free changeover contacts 	
1IO 1080	**Digital daily time switch with automatic standard time/daylight saving time change 1 channel - 2 DIN**	**12**
	1 potential-free changeover contact 	
1IO 1280	**Digital daily time switch with automatic standard time/daylight saving time change 2 channels - 2 DIN**	**12**
	2 potential-free changeover contacts 	
1IO 1081	**Digital weekly time switch with automatic standard/daylight saving time time change 1 channel - 2 DIN**	**12**
	1 potential-free changeover contact 	
1IO 1281	**Digital weekly time switch with automatic standard/daylight saving time change 2 channels - 2 DIN**	**12**
	2 potential-free changeover contacts 	





Legend:
Pin 1 VDD (power supply)
Pin 2 relay output 1
Pin 3 relay output 2
Pin 4 GND earth

1IO 1080/M	**Digital daily time switch module with automatic standard time/daylight saving time change 1 channel - 2 DIN**	**1**
1IO 1280/M	**Digital daily time switch module with automatic standard time/daylight saving time change 2 channels - 2 DIN**	**1**
1IO 1081/M	**Digital weekly time switch module with automatic standard time/daylight saving time change 1 channel - 2 DIN**	**1**
1IO 1281/M	**Digital weekly time switch module with automatic standard time/daylight saving time change 2 channels - 2 DIN**	**1**



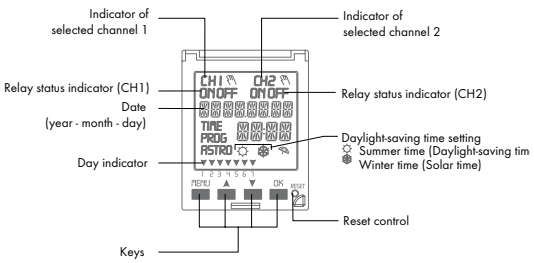
The astronomical time switch is intended for the management of the electrical devices in relation to dawn and sunset times within the set geographical area, without the use of external sensors

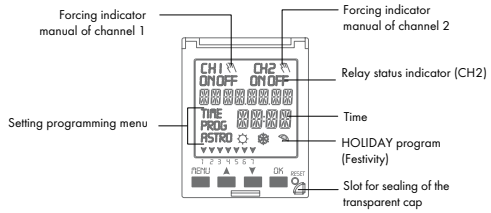
- Menu driven programming with instruction reading in the display
- Models with one or two relay control outputs
- Programming keys: 1 menu key - 2 setting and menu scrolling keys 1 data confirmation key
- Calendar: year - month - day - hour and minutes
- Yearly clock with calendar up to 31/12/2172
  - Clock accuracy: ± 1 s per day
  - Dawn/sunset calculation accuracy: ± 1 min
  - Programming resolution 1 min
  - Charge reserve with lithium battery: approx. 6 years
- Non-volatile memory
- Automatic Standard Time/Daylight Saving Time change
- Weekly and daily intervention programming
- Daily dawn/sunset data update
- Relay output operation hour-counter
- Programming interruption (holiday)

Bilingual simplified programming:
- ITALIAN (default): setting of the capital of the province
- ENGLISH: setting of latitude, longitude, installation place

Note: all items can be installed on the rear of the switchboard by means of optional accessories (KTMP2)

DISPLAY LEGEND AND KEY FUNCTIONS

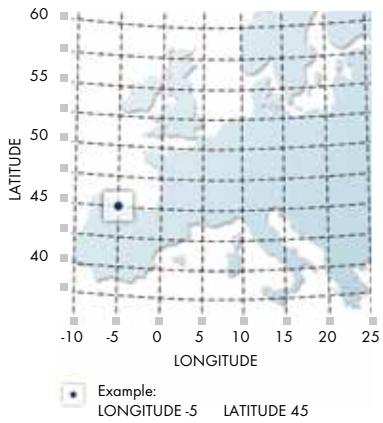




TECHNICAL SPECIFICATIONS

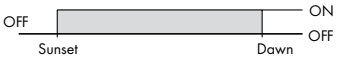
Power supply voltage	230V c.a. 50 - 60Hz
Contact rated data	16(2) A / 250V c.a.
Max program number (ON-OFF)	6 (model with 2 channels)
ON - OFF minimum connection time	1 minute
Displays	in LCD display 1" 1/2
Max commutable power	3500 VA (for individual contact)
Power: Incandescent LPs	2300 W
Power: Fluorescent tube LPs, not compensated	1000 W
Power: Parallely comp. fluorescent tube LPs	500W (tot capacity 70 microF)
Power: Compact, fluorescent LPs	600W
Max cross-section of wires to terminals	2.5 mm^2
Protection degree (IP)	IP 20 IP 30 (with cover) IP 40 (on the rear of the switchboard)
Type of output	terminals with captive screw
Insulation class	II ⧈
ON/OFF relay signalling	ON/OFF in LCD display
Charge reserve	8 years
Type of reserve	LITHIUM battery
Time tolerance	+ - 0.5 sec/day
Operating temperature limits	0°C +50°C
Storing temperature	-10°C +65°C
Type of installation	DIN guide / wall-mounted / on the rear of the switchboard
Case	thermoplastic - grey RAL 7035
Type of use	civil / tertiary / industrial
Controls	multifunction keys (menu programming) confirmation button
Clock setting accuracy	digital for hours / minutes
Daylight saving time change	manual
Programming	with menus - programs protected in EEPROM
Dimensions (LxWxH)	35 x 60 x 128

MAP WITH LATITUDE / LONGITUDE



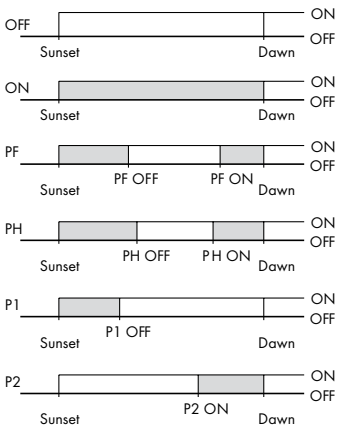
Installations abroad (OTHER COUNTRY).
Enter latitude and longitude degrees of the place.
These data can be obtained from any geographic atlas or GPS system.

PROGRAMMING DIAGRAM ART. 4090



Note: in the tables, the grey filling means the relay output ON

PROGRAMMING DIAGRAM ART. 4290



OFF no intervention

ON night intervention

PF night intervention with interruption and programmed restart (weekday program)

PH night intervention with interruption and programmed restart (holiday program)

P1 night intervention with programmed interruption

P2 programmed intervention delay

Note: programming starts with the sunset of the selected day and ends with the dawn of the following day.
CH1 and CH2 outputs are always in OFF position from sunset to dawn.

CODE	DESCRIPTION	PACKAGE
1IO 4090	**Astronomical time switch "SIRIO" 1 channel - 2 DIN**	**12**



1 potential-free changeover contact

The time switch activates the load at sunset and deactivates it at dawn

1IO 4290	**Astronomical time switch "SIRIO" 2 channels - 2 DIN**	**12**



2 potential-free changeover contacts

Channel 1: *weekly / daily time programming for activation / deactivation of the load at night-time*

Channel 2: *the load activates at sunset and deactivates at dawn*



The programming process makes these digital models completely similar to electromechanical models with tappets,additionally with:

- Digital accuracy of intervention times
- Possibility to program no. 96 ON/OFF interventions in daily models and no. 672 interventions in weekly models - 1 ON/OFF intervention every 15 minutes
- Programming keys are clear to identify and handle in the front of the product
- Models with automatic +1h / -1h time change according to the European calendar

CODE	DESCRIPTION			PACKAGE
1IO 0070	**Digital daily time switch - 1 DIN**			**10**
	1 potential-free changeover contact		*ON / OFF minimum 15'*	
1IO 0071	**Digital weekly time switch - 1 DIN**			**10**
	1 potential-free changeover contact		*ON / OFF minimum 15''*	
1IO 1070	**Digital daily time switch with automatic standard time/daylight saving time change - 1 DIN**			**10**
	1 potential-free changeover contact		*ON / OFF minimum 15'*	
1IO 1071	**Digital weekly time switch with automatic standard time/daylight saving time change - 1 DIN**			**10**
	1 potential-free changeover contact		*ON / OFF minimum 15'*	

DISPLAY LEGEND AND KEY FUNCTIONS



PROGRAMMING EXAMPLE

ON from 6:00am OFF at 8:30am
1 -press the key P to access intervention
2 -with the keys ▲and ▼ select the time of intervention: 06
with rider keys ◔◑, ◐ and ◔ activate the quarters of the
3 -hour concerning the hours in which you want to activate
the relay until reaching 8:30am

TECHNICAL SPECIFICATIONS

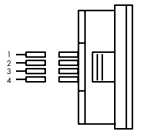
Power supply voltage	230V c.a. 50 - 60Hz
Power supply voltage	16(2) A / 250V c.a.
Max program number (ON-OFF)	96 (daily) / 672 (weekly)
ON - OFF minimum connection time	15 minutes
Displays	in LCD display, 1/4 inches
Max commutable power	3500 VA (for individual contact)
Power: Incandescent LPs	2300 W
Power: Fluorescent tube LPs, not compensated	1000 W
Power: Parallely comp. fluorescent tube LPs	500W (tot capacity 70 microF)
Power: Compact, fluorescent LPs	600W
Max cross-section of wires to terminals	2.5 mm^2
Protection degree (IP)	IP 20 IP 40 (on the rear of the switchboard)
Type of output	terminals with captive screw
Insulation class	II ⧈
ON/OFF relay signalling	ON/OFF in LCD display
Charge reserve	max. approx. 15 days
Type of reserve	NiMH rechargeable battery
Time tolerance	+ - 0.5 sec/day
Operating temperature limits	0°C +50°C
Storing temperature	-10°C +50°C
Type of installation	DIN guide / on the rear of the switchboard
Case	thermoplastic - grey RAL 7035
Type of use	civil / tertiary / industrial
Controls	programming keys ON/OFF manual function key
Clock setting accuracy	digital for hours / minutes
Daylight saving time change	automatic (for items 1070 and 1071)
Dimensions (LxWxH)	17.5 x 60 x 90



The programming process makes these digital models completely similar to electromechanical models with tappets, additionally with:

- Digital accuracy of the time switch
- Possibility to program no. 96 ON/OFF interventions in daily models and no. 672 interventions in weekly models - 1 ON/OFF intervention every 15 minutes
- Programming keys that are clear to identify and handle in the front of the product

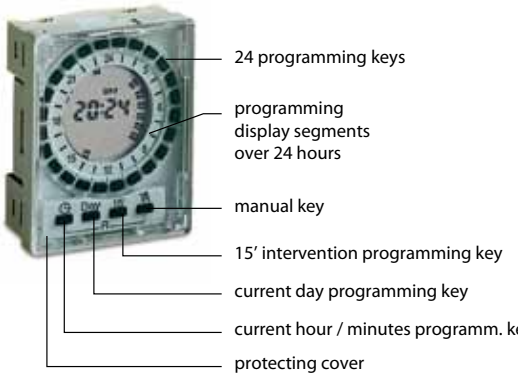
CODE	DESCRIPTION		PACKAGE
1IO 0022/D15	**Digital daily time switch with tappets and display - 2 DIN**		**10**
	1 potential-free changeover contact	*ON / OFF minimum 15'*	
1IO 0024/D15	**Digital weekly time switch with tappets and display - 2 DIN**		**10**
	1 potential-free changeover contact	*ON / OFF minimum 15'*	



Legend:
Pin 1 VDD (power supply)
Pin 2 network presence signal
Pin 3 relay output
Pin 4 GND earth

1IO 0022/D15M	**Daily time switch module with tappets and display - 2 DIN**	**1**
1IO 0024/D15M	**Weekly time switch module with tappets and display - 2 DIN**	**1**

DISPLAY LEGEND AND KEY FUNCTIONS



Clock programming

1st pressing =	whole hour	ON
2nd pressing =	first 1/2 hour	ON
3rd pressing =	second 1/2 hour	ON
4th pressing =	non-programmed hour	

Within every programmed 1/2 hour, you can select first and/or second quarter of hour.

Note: All items can be installed on the rear of the switchboard by means of optional accessories (KTMP/2)

TECHNICAL SPECIFICATIONS

Power supply voltage	230V c.a. 50 - 60Hz
Power supply voltage	16(2) A / 250V c.a.
Max program number (ON-OFF)	96 (daily) / 672 (weekly)
ON - OFF minimum connection time	15 minutes
Displays	in LCD display 1 round
Max commutable power	3500 VA (for individual contact)
Power: Incandescent LPs	2300 W
Power: Fluorescent tube LPs, not compensated	1000 W
Power: Parallely comp. fluorescent tube LPs	500W (tot capacity 70 microF)
Power: Compact, fluorescent LPs	600W
Max cross-section of wires to terminals	2.5 mm^2
Protection degree (IP)	IP 20 IP 30 (with cover) IP 40 (on the rear of the switchboard)
Type of output	terminals with captive screw
Insulation class	II ⧈
ON/OFF relay signalling	ON/OFF in LCD display
Charge reserve	max 15 days
Type of reserve	NiMH rechargeable battery
Time tolerance	+ - 1 sec/day
Operating temperature limits	0°C +50°C
Storing temperature	-10°C +50°C
Type of installation	DIN guide / wall-mounted / on the rear of the switchboard
Case	thermoplastic - grey RAL 7035
Type of use	civil / tertiary / industrial
Embedded controls	programming keys ON/OFF manual function key
Clock setting accuracy	digital for hours / minutes
Dimensions (LxWxH)	35 x 60 x 128

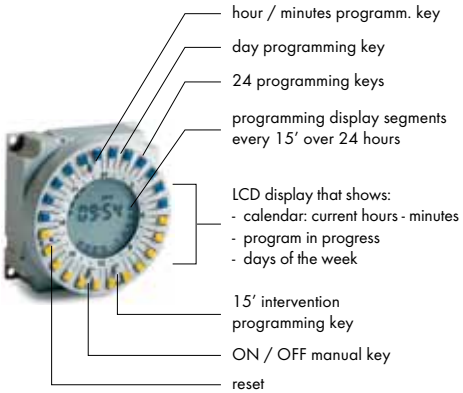




It is programmed as a clock with tappets
Accurate as a digital device

CODE	DESCRIPTION	PACKAGE
1IO 0012D15	**Digital daily time switch with tappets and display 72x72**	**10**
	1 potential-free changeover contact — *ON / OFF minimum 15'*	
1IO 0016D15	**Digital weekly time switch with tappets and display 72x72**	**10**
	1 potential-free changeover contact — *ON / OFF minimum 15'*	
1IO 0012D15/M230	**Digital daily time switch module with tappets and display 60x60 - 230V 50/60Hz**	**1**
1IO 0016D15/M230	**Digital weekly 230V time switch module with tappets and display 60x60 - 230V 50/60Hz**	**1**

DISPLAY LEGEND AND KEY FUNCTIONS



Note: Items 0012D15 - 0016D15 can be installed on the rear of the switchboard with optional accessory SG001

TECHNICAL SPECIFICATIONS

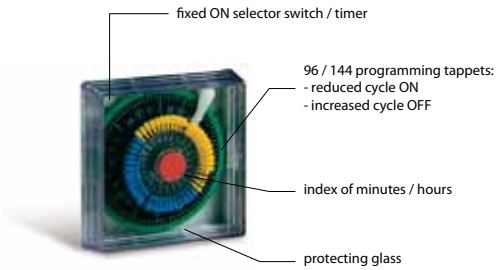
Power supply voltage	230V c.a. 50 - 60Hz
Contact rated data	16(2) A / 250V c.a.
Max program number (ON-OFF)	96 (daily) / 672 (weekly)
ON - OFF minimum connection time	15 minutes
Displays	in LCD display round
Max commutable power	3500 VA (for individual contact)
Power: Incandescent LPs	2300 W
Power: Fluorescent tube LPs, not compensated	1000 W
Power: Parallely comp. fluorescent tube LPs	500W (tot capacity 70 microF)
Power: Compact, fluorescent LPs	600W
Max cross-section of wires to terminals	2.5 mm^2
Protection degree (IP)	IP 40 (wall-mounted - on the rear of the switchboard)
Type of output	terminals with captive screw
Insulation class	II ⧈
ON/OFF relay signalling	ON/OFF in LCD display
Charge reserve	max. approx. 15 days
Type of reserve	NiMH rechargeable battery
Time tolerance	+ - 1 sec/day
Operating temperature limits	0°C +50°C
Storing temperature	-10°C +50°C
Type of installation	wall-mounted / on the back of the switchboard / recessed
Case	thermoplastic - grey RAL 7035
Type of use	civil / tertiary / industrial
Controls	programming keys - reset key ON/OFF manual function key
Clock setting accuracy	digital for hours / minutes
Dimensions (LxWxH)	72 x 67.5 x 101

Electromechanical time switches with tappets



CODE	DESCRIPTION		PACKAGE
1IO 0012	**Daily electromechanical time switch 1 circuit**		**10**
	1 potential-free changeover contact	*ON / OFF minimum 15'*	
1IO 0014	**Daily electromechanical time switch with 2 circuits**		**10**
	2 potential-free changeover contacts	*ON / OFF minimum 15' : 1st circuit 30' : 2nd circuit*	
1IO 0015	**Weekly electromechanical time switch with 2 circuits**		**10**
	2 potential-free changeover contacts	*ON / OFF minimum 30' : daily circuit 60' : weekly circuit*	

DISPLAY LEGEND AND KEY FUNCTIONS



Note: Items 0012 - 0014 - 0015 can be installed on the rear of the switchboard with optional accessory SG001

TECHNICAL SPECIFICATIONS

Power supply voltage	230V c.a. 50 - 60Hz
Contact rated data	16(4) A / 250V c.a.
Max program number (ON-OFF)	96 (0012) / 144 (0014 - 0015)
ON - OFF minimum connection time	15 / 30 minutes (daily) 60 minutes (weekly)
Displays	mechanical tappets ring
Max. commutable power	3500 VA (for individual contact)
Max cross-section of wires to terminals	2.5 mm^2
Protection degree (IP)	IP 30
Type of output	terminals with captive screw
Insulation class	II ⧈
Charge reserve	approx 150 hours max
Type of reserve	NiCd rechargeable battery
Time tolerance	+ - 1 sec/day
Operating temperature limits	-10°C +50°C
Storing temperature	-10°C +50°C
Type of installation	wall-mounted / on the back of the switchboard
Case	thermoplastic - grey RAL 7035
Type of use	civil / tertiary / industrial
Controls	mechanical tappets selector switch: fixed ON / timer position
Clock setting accuracy	mechanical with reference index
Programming	mechanical tappets (locks 15' / 60')
Dimensions (LxWxH)	72 x 67.5 x 101



0171



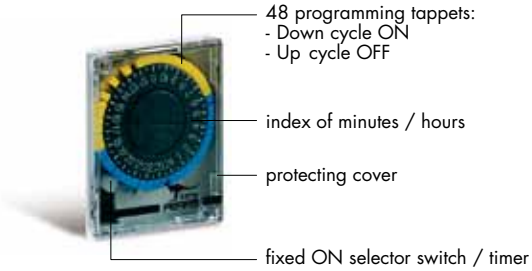
0021 - 0022 - 0024



0135 - 0136

CODE	DESCRIPTION	PACKAGE
1IO 0171	**Daily time switch with tappets and charge reserve - 1 DIN**	**10**
	1 potential-free NO contact — *ON / OFF minimum 15'*	
1IO 0021	**Daily time switch with tappets without charge reserve - 2 DIN**	**10**
	1 potential-free changeover contact — *ON / OFF minimum 30'*	
1IO 0022	**Daily time switch with tappets and charge reserve - 2 DIN**	**30**
	1 potential-free changeover contact — *ON / OFF minimum 30'*	
1IO 0024	**Weekly time switch with tappets and charge reserve - 2 DIN**	**10**
	1 potential-free changeover contact — *ON / OFF minimum 210' (approx. 3.5 hours)*	
1IO 0135	**Daily time switch, two circuits with charge reserve - 4 DIN**	**10**
	2 potential-free changeover contacts — *ON / OFF daily minimum 30' minimum weekly 30'*	
1IO 0136	**Weekly and daily time switch with charge reserve - 4 DIN**	**10**
	2 potential-free changeover contacts — *ON / OFF daily minimum 30' minimum weekly 210' (approx. 3.5 hours)*	

DISPLAY LEGEND AND KEY FUNCTIONS



Note: All items can be installed on the rear of the switchboard by means of optional accessories (KTMP2 or KTMP4)

TECHNICAL SPECIFICATIONS

Power supply voltage	230V c.a. 50 - 60Hz
Contact rated data	16(2) A / 250V c.a.
Max program number (ON-OFF)	48
ON - OFF minimum connection time	30 minutes (daily) 15' (item 0171) approx. 3.5 hours (weekly)
Displays	mechanical tappets ring
Max commutable power	3500 VA (for individual contact)
Max cross-section of wires to terminals	2.5 mm^2
Protection degree (IP)	IP 20 IP 30 (with cover) IP 40 (on the rear of the switchboard)
Type of output	terminals with captive screw
Insulation class	II ⧈
Charge reserve	approx 150 hours max (max 100 hours mod. 0171)
Type of reserve	NiCd rechargeable battery
Time tolerance	+ - 1 sec/day
Operating temperature limits	-10°C +50°C
Storing temperature	-10°C +50°C
Type of installation	DIN guide / wall-mounted / on the rear of the switchboard
Case	thermoplastic - grey RAL 7035
Type of use	civil / tertiary / industrial
Controls	mechanical tappets ring selector switch: fixed ON / timer position
Clock setting accuracy	mechanical with reference index
Programming	mechanical key ring (blocks 30'/ 210')
Dimensions (AxPxH) Dimensions (AxPxH) Dimensions (AxPxH)	1DIN 17.5 x 60 x 128 2DIN 35 x 60 x 116 4DIN 70 x 60 x 116

CODE	DESCRIPTION	PACKAGE
1IO 0055	**Daily time switch, plug/socket Shuko 16 A**	**10**
	Power supply 230V a.c. 50/60Hz Contacts 16 A Maximum commutable power 3500VA Minimum intervention interval 15 min ON /TIMER control	
1IO 0056	**Weekly time switch, plug/socket Shuko 16 A**	**10**
	Power supply 230V a.c. 50/60Hz Contacts 16 A Maximum commutable power 3500VA Minimum intervention interval 120 min ON /TIMER control	

ACCESSORIES

1PA SG001	**Plastic profile for installing 72x72 time switches on the rear of the switchboard**	**10**
1PA KTMP2	**Kit for installation of 2 DIN modules on the rear of the switchboard**	**10**
	Kit including: 2 hooks + finishing front for installing 2 DIN modules on the rear of the switchboard	
1PA KTMP4	**Kit for installation of 4 DIN modules on the rear of the switchboard**	**10**
	Kit including: 2 hooks + finishing front for installing 4 DIN modules on the rear of the switchboard	

CODE	DESCRIPTION	PACKAGE

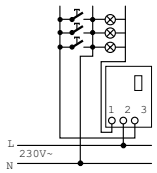
1IT 1051 — **Staircase timer, wall-mounted** — **36**



Electronic timer switch, can perfectly replace the three-wire electromechanical models made in Germany, Spain, etc

Power supply 230V a.c. +-10%
50/60Hz
1 polarized NO contact output:
16(3) A / 250 V a.c.
Maximum controllable power 3300W
Adjustable timing
from 30 sec at 7 min +/-10%
Restorable
3-wire wiring

Max 30 external START buttons
(also luminous)
Fixed light switch
Installed to the panel and/or wall-mounted
Cables up to 2.5 sq.mm
Dimensions (LxWxH) 88 x 55 x 110

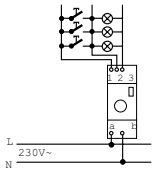


1IT 1061 — **Staircase timer, modular 2 DIN** — **30**



Power supply 230V a.c. +5%-10%
50/60Hz
1 polarized NO contact output:
10A / 250 V a.c.
Maximum controllable power 2200W
Timing adjustable from 1 min to 18 min
Operation intended with any number of luminous buttons

Switch for Operation with fixed light
ON relay signalling warning light
The LED is ON
3-wire wiring in staircase post
Also suitable for wall-mounting
Installation on DIN rail and/or wall-mounted
Dimensions (LxWxH) 35 x 60 x 128

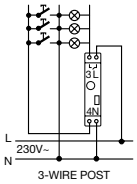


1IT 1063 — **Staircase timer, modular 1 DIN** — **30**



Power supply 230V a.c. 50/60Hz
1 polarized NO contact output:
16(2) A / 250 V a.c.
Power: Incandescent LPs, 2300W
Power: Fluorescent LPs, 290 W
Power: Electronic fluorescent LPs,105 W
Adjustable timing
from 30 sec at 10 min +/-10%
Restorable

3-wire wiring in staircase post
Cables up to 2.5 sq.mm
Max 25 external START buttons (also luminous)
Fixed light switch
Installation on DIN rail
Dimensions (LxWxH) 17.5 x 60 x 90

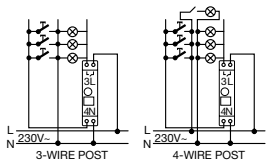


1IT 1063.2 — **Staircase timer, modular 1 DIN** — **30**



Power supply 230V a.c. 50/60Hz
1 polarized NO contact output:
16(3) A / 250 V a.c.
Power: Incandescent LPs, 2300W
Power: Fluorescent LPs, 290 W
Power: Electronic fluorescent LPs, 105 W
Adjustable timing
from 30 sec at 10 min
Restorable

3- or 4-wire wiring in staircase post
Cables up to 2.5 sq.mm
Max 25 external START buttons (also luminous)
Fixed light selector switch
Installation on DIN rail
Dimensions (LxWxH) 17.5 x 60 x 90



CODE	DESCRIPTION	PACKAGE

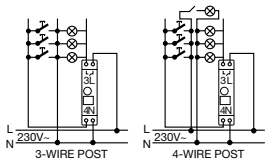
1IT 1065.2 — Multifunction staircase timer, modular 1 DIN — 30



Power supply 230V a.c. 50/60Hz
1 polarized NO contact output:
16(3) A / 250 V a.c.
Power: Incandescent LPs, 2300W
Power: Fluorescent LPs, 290 W
Power: Electronic fluorescent LPs, 105W
Adjustable timing from 30 sec at 17 min
Restorable 3- or 4-wire wiring in staircase post
Cables from 1 sq.mm to 2.5 sq.mm
Luminous buttons max 25 (mod. 3 wires) max 35 (mod. 3/4 wires)

Dip switch to select the Operating mode:
- Reloadable timer relay with deactivation warning
- Timer impulse relay with deactivation warning
- Fixed ON relay
- Impulse relays

Staircase cleaning function 30min
Installation on DIN rail
Dimensions (LxWxH) 17.5 x 60 x 90
Dimensiones (AxPxH) 17.5 x 60 x 90

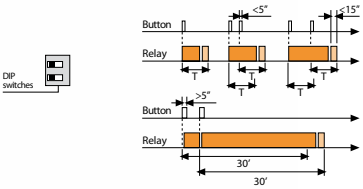




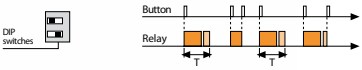
Cleaning function:
if you press any staircase-push button longer than 5”, a 30-minute timing will be entered

OPERATING MODES

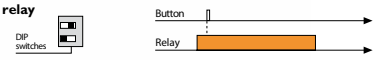
1 - Resettable timer relay with turning-off warning



2 - Timer impulse relay with turning-off warning



3 - Fixed ON relay



4 - Impulse relay



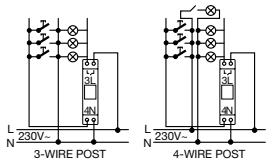
1IT 1066 — Multifunction staircase timer, modular 1 DIN — 10

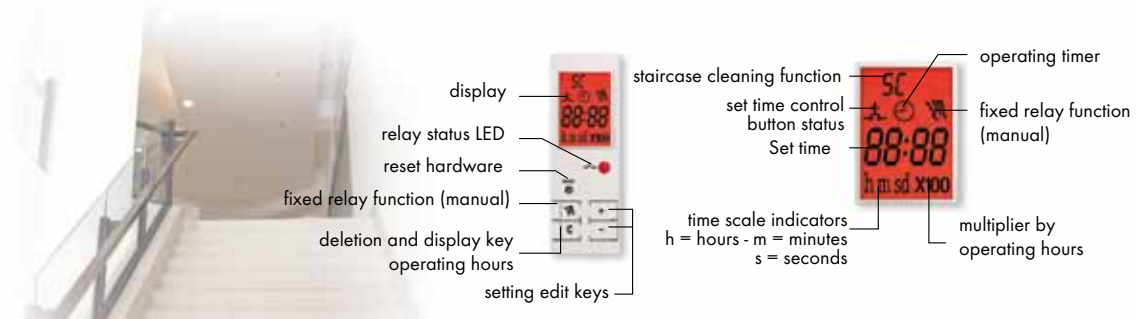


Timer switch with multifunction LCD display for an easy and finer adjustment of the functions.

Power supply 230V a.c. 50/60Hz
1 polarized NO contact output:
16(3) A / 250 V a.c.
Power: Incandescent LPs, 2300W
Power: Fluorescent LPs, 290 W
Power: Electronic fluorescent LPs, 105 W
Adjustable timing from 1 sec at 99 min and 59 sec
Restorable
Staircase cleaning function 30min (modifiable from 1min to 99min)
Deactivation warning from 300 msec to 15sec

Max 35 luminous buttons
Protection degree IP40
Fixed relay key
Hour counter function for lamp change
Input status display (open/close)
Timing shown in the display
Time scale indicators: h m s
3- or 4-wire wiring in staircase post
Cables from 1 sq.mm to 2.5 sq.mm
Dimensions (LxWxH) 17.5 x 60 x 90





- timing programming with display of residual time over the maximum distance of the staircase space
- staircase cleaning function with displayed initial and residual programming time
- counter for working hours of the connected lamps

CODE	DESCRIPTION	PACKAGE

1IC 7242

Photocell lighting control switch for wall-mounting and/or pole installation — **24**



Power supply 230V a.c. 50/60Hz
Outdoor installation
Output 1 polarized NO contact: 16(2) A/250Va.c.
Connection with cables up to 2.5 sq.mm
Wiring with sheathed cable diameter 4-9 mm
Intervention threshold adjustment trimmer, 2 - 200 Lux
Threshold signalling LED
Anti-UV opaline case
Protection degree IP54
Dimensions (ØLxWxH) Ø82 x 97 x 101

1IC 7243

Photocell lighting control switch with replaceable control module for wall-mounting and/or pole installation — **24**



Product being particularly suitable to facilitate system maintenance personnel: the control part that can be removed from the base of the contacts allows a quick intervention in the product without disconnecting the load

Power supply 230V a.c. 50/60Hz
Outdoor installation
Output 1 polarized NO contact: 16(2) A/250Va.c.
Connection with cables up to 2.5 sq.mm
Wiring with sheathed cable diameter 7-11 mm
Pre-calibrated at the factory at 10 Lux ± 20%
Intervention threshold adjustment trimmer, 2 - 200 Lux
Threshold signalling LED
Anti-UV opaline case
Protection degree IP65
Dimensions (LxWxH) 72 x 37.5 x 147

1PR 7243M

Spare module for photocell lighting control switch item 7243 — **1**



Power supply 230V a.c. 50/60Hz
Outdoor installation
Output 1 polarized NO contact: 16(2) A/250Va.c.
Pre-calibrated at the factory at 10 Lux ± 20%
Intervention threshold adjustment trimmer, 2 - 200 Lux
Threshold signalling LED Anti-UV opaline case
Dimensions (LxWxH) 72 x 37.5 x 80

1IC 7245

Photocell lighting control switch model "FEBO" for wall-mounting and/or pole installation — **24**



The factory 10 LUX calibration prevents difficult interventions by the installer

Power supply 230V a.c. 50/60Hz
Outdoor installation
Output 1 polarized NO contact: 16(2) A/250Va.c.
Connection with cables up to 2.5 sq.mm
Wiring with sheathed cable diameter 7-11 mm
Pre-calibrated at the factory at 10 Lux ± 20%
Intervention threshold adjustment trimmer, 2 - 200 Lux
Threshold signalling LED
Anti-UV opaline case
Protection degree IP65
Dimensions (LxWxH) 55 x 45 x 106

CODE	DESCRIPTION	PACKAGE

1IC 7051 — **Photocell lighting control switch with adjustment 2-10.000Lux, 2 DIN** — **10**



It allows progressively lighting street tunnels

Power supply 230V a.c. 50/60Hz DIN assembly plus outdoor probe Output 1 changeover contact, potential-free: 16(2) A / 250V a.c.
Connection with cables up to 2.5 sq.mm
Adjustment range 2-100 / 2-1000 / 2-10000 Lux (3 scales)
Activation delay 8 sec ± 10%
Deactivation delay 38 sec ± 10%
Threshold calibration signalling LED
Operation signalling LED Intervention threshold adjustment trimmer
Dimensions DIN (LxWxH) 35 x 60 x 90
EXTERNAL PROBE
Anti-UV opaline case
Protection degree IP65
Dimensions of the probe (LxWxH) 28 x 48 x 56

1IC 7052 — **Photocell lighting control switch with adjustment 2-200 Lux, 2 DIN** — **10**



Provided with hysteresis and activation / deactivation delays to prevent false switching

Power supply 230V a.c. 50/60Hz DIN assembly plus outdoor probe Output 1 changeover contact, potential-free: 16(2) A / 250V a.c.
Connection with cables up to 2.5 sq.mm
Adjustment range 2-200 Lux adjustable
Activation delay 8 sec ± 10%
Deactivation delay 38 sec ± 10%
Threshold calibration signalling LED
Operation signalling LED Intervention threshold adjustment trimmer
Dimensions DIN (LxWxH) 35 x 60 x 90
EXTERNAL PROBE
Anti-UV opaline case
Protection degree IP65
Dimensions of the probe (LxWxH) 28 x 48 x 56

1IC 7053 — **Photocell lighting control switch with adjustment 2-100 Lux, 1 DIN** — **10**



Great performance with the minimum use of space for the installation in DIN manual switchboards

Power supply 230V a.c. 50/60Hz DIN assembly plus outdoor probe Output 1 polarized NO contact, potential-free: 16(2) A / 250V a.c.
Connection with cables up to 2.5 sq.mm
Adjustment range 2-100 Lux adjustable
Activation delay 8 sec ± 10%
Deactivation delay 38 sec ± 10%
Threshold calibration signalling LED
Operation signalling LED Intervention threshold adjustment trimmer
Dimensions DIN (LxWxH) 35 x 60 x 90
EXTERNAL PROBE
Anti-UV opaline case
Protection degree IP65
Dimensions of the probe (LxWxH) 28 x 48 x 56

1PR 6091 — **Outdoor spare probe for DIN photocell lighting control switches** — **1**



External wall-mount and/or pole installation
Connection with cables from 0.75 sq.mm to 2.5 sq.mm
Wiring with sheathed cable diameter 4-8 mm
Anti-UV opaline case
Protection degree IP65
Dimensions of the probe (LxWxH) 28 x 48 x 56

ACCESSORIES

1PA KTMP2 — **Kit for installation of 2 DIN modules on the rear of the switchboard** — **1**



Kit including:
2 hooks + finishing front for installing 2 DIN modules on the rear of the switchboard

CODE	DESCRIPTION	PACKAGE

Movement detectors are electronic switches controlled by a passive infrared sensor being sensitive to heat radiations emitted by moving people.
The movement detector activates the connected devices (ex. lamp activation) when detects a movement within its covered area; it will be deactivated with a time delay adjusted by the user.
An adjustable photocell lighting sensor inhibits the activation of lighting according to environmental brightness.
The detectors are used to switch on the lights in premises that are used only for brief periods: garages, access paths and entrances to houses, arcades, staircases, corridors, toilets, etc.

1SP SP001 **Infrared movement detector - IP44** **8**



Power supply 230V 50Hz
Wall-mounted, with internal or external angle and supplied accessories
Maximum lighting load:
incandescent lamps 2000W
fluorescent lamps 480W
Detection angle 110°
Swivelling angle: horizontal 180°, vertical 15°

Max detection distance: 12m
Lighting limit adjustment:
5–1000 Lux
Adjustment of deactivation delay:
8 sec–12 min
Sensitivity adjustment: 3–12m
Insulation class II
Dimensions (LxWxH) 72 x 129 x 100

1SP SP002 **Infrared movement detector - IP54** **8**



Power supply 230V 50Hz
Wall-mounted, with internal or external angle and supplied accessories
Maximum lighting load:
incandescent lamps 2000W
fluorescent lamps 480W
Detection angle 110°
Swivelling angle: horizontal 180°, vertical 15°

Max detection distance: 12m
Lighting limit adjustment:
5–1000 Lux
Adjustment of deactivation delay:
8 sec–12 min
Sensitivity adjustment: 3–12m
Insulation class II
Dimensions (LxWxH) 72 x 129 x 100

1SP SP005 **Infrared movement detector - IP55** **4**



Power supply 230V 50Hz
Wall-mounted, with internal or external angle and supplied accessories
Maximum lighting load:
incandescent lamps 2000W
fluorescent lamps 480W
Detection angle 240°
Swivelling angle: horizontal 180°, (limitable)

Max detection distance: 12m
Lighting limit adjustment:
5–1000 Lux
Adjustment of deactivation delay:
5 sec–12 min
Sensitivity adjustment: 3–12m
Insulation class II
Dimensions (LxWxH) 72 x 106 x 88

CODE	DESCRIPTION	PACKAGE

1SP SP010 — **Infrared movement detector - IP44** — **4**



Power supply 230V 50Hz
Wall-mounted
Maximum lighting load:
incandescent lamps 1000W
fluorescent lamps400W
Detection angle 180°
Rotation angle of the detection head:
horizontal 70°,vertical 35°

Max detection distance: 12m
Lighting limit adjustment:
0-1000 Lux
Adjustment of deactivation delay:
5 sec–12 min
Insulation class II
Dimensions (LxWxH) 65 x 88 x 95

1SP SP015 — **Ceiling-mounted infrared movement detector - IP20** — **4**



Power supply 230V 50Hz
Ceiling-mounted
Maximum lighting load:
incandescent lamps 2000W
fluorescent lamps 480W
Detection angle 360°

Max detection distance: 6 m
Lighting limit adjustment:
5–1000 Lux
Adjustment of deactivation delay:
2–15 min
Insulation class II
Dimensions (DxW) ø130 x 70

1SP SP020 — **Infrared movement detector to be recessed in false ceilings - IP20** — **4**



Power supply 230V 50Hz
Installation: recessed in false ceilings
Diameter of installation hole: Ø 68mm
Maximum lighting load:
incandescent lamps 2000W
fluorescent lamps 1000VA
Detection angle 360°

Max detection distance: 14 m
Lighting limit adjustment:
5–1000 Lux
Adjustment of deactivation delay:
3 sec–40 min
Insulation class II
Dimensions (DxW) ø86 x 76

CODE	DESCRIPTION	PACKAGE

1PT TT003 — **Wall-mounted PSTN telephone programmer with 2 output channels** — **1**



Wall-mounted
Power supply 230V a.c. 50Hz
Contact range 2(1) A / 250 V a.c.
Code presence LED display
Output status LED display
The access to the controls is protected by a secret code
Setting controls

Ring number setting
Compatibility with answering machine
4-language vocal synthesizer: French, Spanish, Italian, English
Dimensions (LxWxH) 85 x 41 x 128

1PT TT004 — **PSTN telephone programmer with 3 output channels** — **1**



Installed in the switchboard
Power supply 230V a.c. 50Hz
Contact range 2(1) A / 250 V a.c.
Code presence LED display
Output status LED display
The access to the controls is protected by a secret code
Setting controls

Ring number setting
Compatibility with answering machine
5-language vocal synthesizer: French, Spanish, Italian, English, German
Dimensions (LxWxH) 71 x 58 x 90

1PT TT005 — **Telephone programmer with GSM modem 1 output channel - built-in antenna** — **1**



Installed in the switchboard
Power supply 12 V a.c./d.c. +/-20%
Contact range 4(1) A / 250 V a.c.
GSM indicator LED display
Output status LED display
Antenna built in under the front panel
Temperature remote check
Selection of users memorised in the SIM

Query about system conditions
Communication from and for combiner by means of SMS
NTC probe dedicated input (optional)
Dimensions (LxWxH) 71 x 58 x 90

1PT TT005/AE — **Telephone programmer with GSM modem 1 output channel - external antenna** — **1**



Installed in the switchboard
Power supply 12 V a.c./d.c. +/-20%
Contact range 4(1) A / 250 V a.c.
GSM indicator LED display
Output status LED display
External antenna input
Temperature remote check
Selection of users memorised in the SIM

Query about system conditions
Communication from and for combiner by means of SMS
NTC probe dedicated input (optional)
Dimensions (LxWxH) 71 x 58 x 90

TELEPHONE PROGRAMMERS
GSM - TELEPHONE PROGRAMMERS

CODE	DESCRIPTION	PACKAGE

1PT TT006

Telephone programmer with GSM modem, 1 input channel + 2 output channels - built-in antenna — **1**



Installed in the switchboard
Power supply 12 V a.c./d.c. +/-20%
Contact range 4(1) A / 250 V a.c.
GSM indicator LED display
Output status LED display
Antenna built in under the front panel
Temperature remote check
Selection of users memorised in the SIM
Query about system conditions
Communication from and for combiner by means of SMS
NTC probe dedicated input (optional)
Auxiliary programmable input (NO/NC)
Dimensions (LxWxH) 71 x 58 x 90

1PT TT006/AE

Telephone programmer with GSM modem, 1 input channel + 2 output channels - external antenna — **1**



Installed in the switchboard
Power supply 12 V a.c./d.c. +/-20%
Contact range 4(1) A / 250 V a.c.
GSM indicator LED display
Output status LED display
External antenna input
Temperature remote check
Selection of users memorised in the SIM
Query about system conditions
Communication from and for combiner by means of SMS
NTC probe dedicated input (optional)
Auxiliary programmable input (NO/NC)
Dimensions (LxWxH) 71 x 58 x 90

OUTDOOR **GSM** PROGRAMMERS

Programmers manufactured in IP65 outdoor casing, which are particularly suitable to control: condominial gates, lock-up garages …, garden irrigation, garden lighting control.
In applications for condominial gates, it prevents using specific radio controls.

1PT TT007

Outdoor telephone programmer with GSM modem, 1 input channel + 1 output channel – built-in antenna — **1**



Power supply 230V a.c. 50/60Hz
Contact range 10(2) A / 250V a.c.
Signal reception display LED
Relay ON/OFF control from mobile phones by 0/1 impulses and/or SMS messages
Built-in reception/transmission antenna
Anti-UV opaline case
Protection degree IP65
Dimensions (ØLxWxH) Ø82 x 97 x 101



CE marking standards:

LVD: 2006/95/CE — *EN 60950-1*
EMC: 2004/108/CE — *EN 55022, EN 55024*
Radio: 1999/5/CE — *TBR21*

RECESSED IMPULSE RELAYS

ELECTROMECHANICAL



0112AC/I - 0124AC/I - 01230AC/I
0212AC/I - 0224AC/I - 02230AC/I
0412AC/I - 0424AC/I - 04230AC/I
0612AC/I - 0624AC/I - 06230AC/I

ELECTROMECHANICAL MINIATURIZED WITH PREDISPOSITION FOR CAPACITOR LUMINOUS PUSH BUTTONS



01110ACPC - 01230ACPC
04110ACPC - 04230ACPC
06110ACPC - 06230ACPC

CAPACITOR FOR LUMINOUS PUSH BUTTONS



CPL001
CPL002

ELECTRONIC



01230AC/E

DIGITAL TIME RELAYS

DIN MODULAR



200/MT/MF
200/230/MF
200/230/ST

48 X 48



250/MT/MF
250/230/MF
250/230/ST

CE marking standards:

LVD: 2006/95/CE	*EN 61812-1*
EMC: 2004/108/CE	*EN 61812-1*

INDUSTRIAL RELAYS

OCTAL SERIES



080212DC - 080224DC
080248DC - 080260DC
080212AC - 080224AC
080248AC - 0802110AC - 0802230AC

UNDECAL SERIES



110312DC - 110324DC
110348DC - 110360DC
1103212AC - 110324AC
110348AC - 1103110AC - 1103230AC

SOCKETS FOR OCTAL/UNDECAL RELAYS



EK8 - EK11 - ES8
ES11 - ES9 - ES12

MIDI SERIES, 2 CONTACTS



021012DC -021024DC - 021048DC
021012AC -021024AC - 021048AC
0210110AC -0210230AC

MIDI SERIES, 4 CONTACTS



0405512DC - 040524DC - 040548DC
0405512AC - 040524AC - 040548AC
0405110AC - 0405230AC

SOCKETS FOR OCTAL/UNDECAL RELAYS



ES15/2B - ES15/4B
ES15/2N - ES15/3N - ES15/4N
ES15/2S - ES15/3S - ES15/4S

1 DIN MODULAR IMPULSE RELAYS

ELECTROMECHANICAL



0212AC/M - 0224AC/M - 02230AC/M
0412AC/M - 0424AC/M - 04230AC/M

	CE marking standards:
LVD: 2006/95/CE	***EN 60669-1**, EN 60669-2-2*
EMC: 2004/108/CE	***EN 60669-1**, EN 60669-2-2*



MODULES FOR OCTAL/UNDECAL RELAYS

	CE marking standards:
LVD: 2006/95/CE	*EN 61810-1,* *EN 61810-5,* *EN 60255-23*

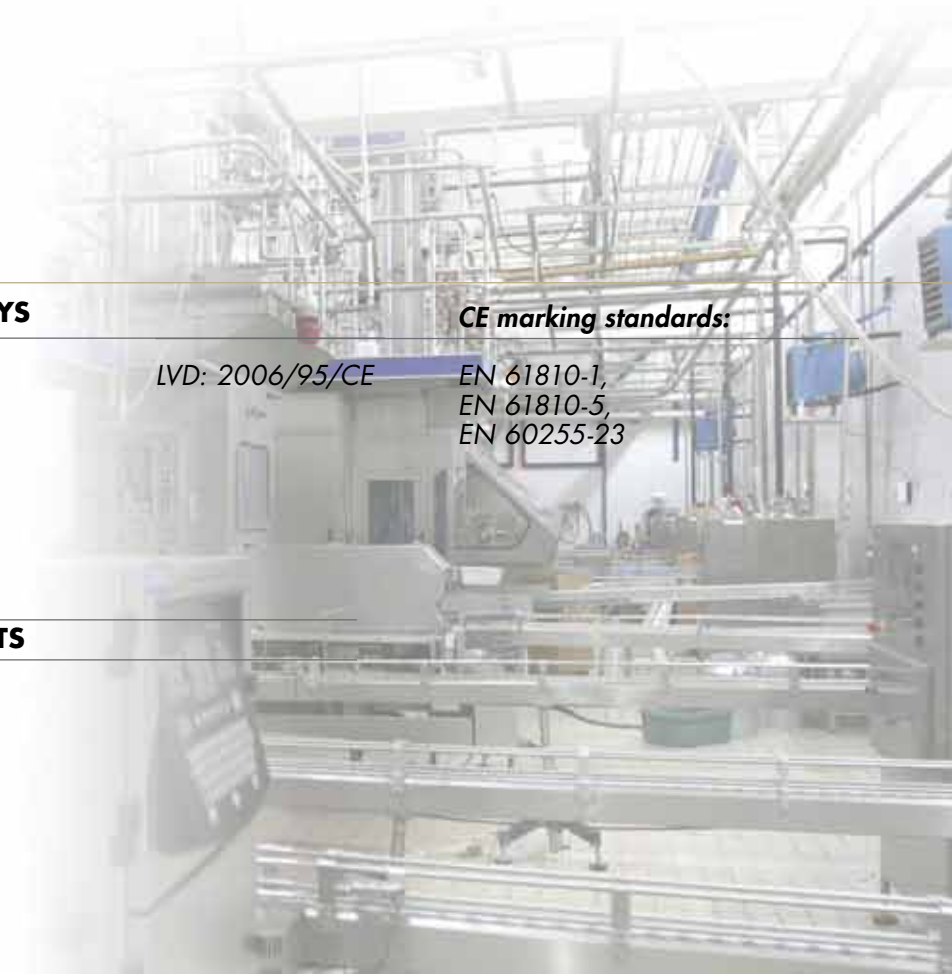


11 - 21
51B - 51D - 51C
71 - 71A - 81

MODULES FOR RELAYS, 2 - 4 CONTACTS



12 - 22
52B - 52D - 52C
72 - 72A - 82



CODE	DESCRIPTION	PACKAGE

1RI 0112AC/I — **Electromechanical impulse relay 12V a.c.** — **20**



Power supply 12 V a.c. 50/60 Hz
Contacts 10 A / 250 V a.c.
Mechanical - sequential operation
Available contacts:
1 contact 2 sequences
Panel/recess mounting

Presetting of fastening holes
with screws
Dimensions (LxWxH) 45 x 22 x 45



1RI 0124AC/I — **Electromechanical impulse relay 24V a.c.** — **20**



Power supply 24 V a.c. 50/60 Hz
Contacts 10 A / 250 V a.c.
Mechanical - sequential operation
Available contacts:
1 contact 2 sequences
Panel/recess mounting

Presetting of fastening holes
with screws
Dimensions (LxWxH) 45 x 22 x 45



1RI 01230AC/I — **Electromechanical impulse relay 230V a.c.** — **20**



Power supply 230V a.c. 50/60 Hz
Contacts 10 A / 250 V a.c.
Mechanical - sequential operation
Available contacts:
1 contact 2 sequences
Panel/recess mounting

Presetting of fastening holes
with screws
Dimensions (LxWxH) 45 x 22 x 45

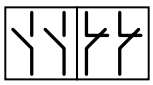


1RI 0212AC/I — **Electromechanical impulse relay 12V a.c.** — **20**



Power supply 12 V a.c. 50/60 Hz
Contacts 10 A / 250 V a.c.
Mechanical - sequential operation
Available contacts:
2 contacts 2 sequences
Panel/recess mounting

Presetting of fastening holes
with screws
Dimensions (LxWxH) 45 x 22 x 45

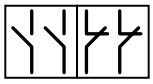


1RI 0224AC/I — **Electromechanical impulse relay 24V a.c.** — **20**



Power supply 24 V a.c. 50/60 Hz
Contacts 10 A / 250 V a.c.
Mechanical - sequential operation
Available contacts:
2 contacts 2 sequences
Panel/recess mounting

Presetting of fastening holes
with screws
Dimensions (LxWxH) 45 x 22 x 45

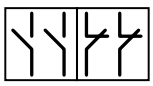


1RI 02230AC/I — **Electromechanical impulse relay 230V a.c.** — **20**



Power supply 230V a.c. 50/60 Hz
Contacts 10 A / 250 V a.c.
Mechanical - sequential operation
Available contacts:
2 contacts 2 sequences
Panel/recess mounting

Presetting of fastening holes
with screws
Dimensions (LxWxH) 45 x 22 x 45



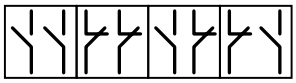
CODE	DESCRIPTION	PACKAGE

1RI 0412AC/I — **Electromechanical impulse relay 12V a.c.** — **20**



Power supply 12 V a.c. 50/60 Hz
Contacts 10 A / 250 V a.c.
Mechanical - sequential operation
Available contacts:
2 contacts 4 sequences
Panel/recess mounting

Presetting of fastening holes
with screws
Dimensions (LxWxH) 45 x 22 x 45

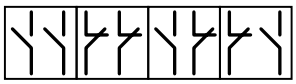


1RI 0424AC/I — **Electromechanical impulse relay 24V a.c.** — **20**



Power supply 24 V a.c. 50/60 Hz
Contacts 10 A / 250 V a.c.
Mechanical - sequential operation
Available contacts:
2 contacts 4 sequences
Panel/recess mounting

Presetting of fastening holes
with screws
Dimensions (LxWxH) 45 x 22 x 45

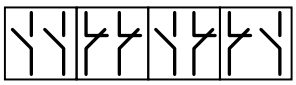


1RI 04230AC/I — **Electromechanical impulse relay 230V a.c.** — **20**



Power supply 230V a.c. 50/60 Hz
Contacts 10 A / 250 V a.c.
Mechanical - sequential operation
Available contacts:
2 contacts 4 sequences
Panel/recess mounting

Presetting of fastening holes
with screws
Dimensions (LxWxH) 45 x 22 x 45

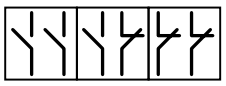


1RI 0612AC/I — **Electromechanical impulse relay 12V a.c.** — **20**



Power supply 12 V a.c. 50/60 Hz
Contacts 10 A / 250 V a.c.
Mechanical - sequential operation
Available contacts:
2 contacts 3 sequences
Panel/recess mounting

Presetting of fastening holes
with screws
Dimensions (LxWxH) 45 x 22 x 45

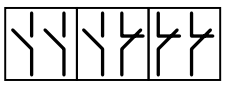


1RI 0624AC/I — **Electromechanical impulse relay 48 V a.c.** — **20**



Power supply 48 V a.c. 50/60 Hz
Contacts 10 A / 250 V a.c.
Mechanical - sequential operation
Available contacts:
2 contacts 3 sequences
Panel/recess mounting

Presetting of fastening holes
with screws
Dimensions (LxWxH) 45 x 22 x 45

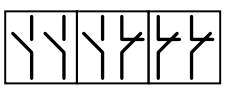


1RI 06230AC/I — **Electromechanical impulse relay 230V a.c.** — **20**



Power supply 230V a.c. 50/60 Hz
Contacts 10 A / 250 V a.c.
Mechanical - sequential operation
Available contacts:
2 contacts 3 sequences
Panel/recess mounting

Presetting of fastening holes
with screws
Dimensions (LxWxH) 45 x 22 x 45



1VA CPL001 — **Capacitor for luminous push buttons** — **10**

Capacitor to be used with impulse relays in case of systems with luminous push buttons

IMPULSE RELAYS
RECESSED, **ELECTROMECHANICAL, MINIATURIZED** AND WITH PREDISPOSITION FOR CAPACITOR, FOR LUMINOUS PUSH BUTTONS

CODE	DESCRIPTION	PACKAGE

1RI 01110ACPC — **Electromechanical impulse relay with 110V a.c. predisposition for capacitor** — **20**



Power supply 110 V a.c. 50/60 Hz
Contacts 10 A / 250 V a.c.
Mechanical - sequential operation
Available contacts:
1 contact 2 sequences
Panel/recess mounting

Predisposition for fastening holes with screws
Predisposition for built-in capacitor
Dimensions (LxWxH) 35 x 22 x 45



1RI 01230ACPC — **Electromechanical impulse relay with 230V a.c. predisposition for capacitor** — **20**



Power supply 110 V a.c. 50/60 Hz
Contacts 10 A / 250 V a.c.
Mechanical - sequential operation
Available contacts:
1 contact 2 sequences
Panel/recess mounting

Predisposition for fastening holes with screws
Predisposition for built-in capacitor
Dimensions (LxWxH) 35 x 22 x 45

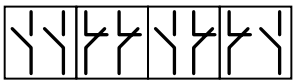


1RI 04110ACPC — **Electromechanical impulse relay with 110V a.c. predisposition for capacitor** — **20**



Power supply 110 V a.c. 50/60 Hz
Contacts 10 A / 250 V a.c.
Mechanical - sequential operation
Available contacts:
2 contacts 4 sequences
Panel/recess mounting

Predisposition for fastening holes with screws
Predisposition for built-in capacitor
Dimensions (LxWxH) 35 x 22 x 45

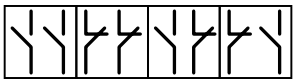


1RI 04230ACPC — **Electromechanical impulse relay with 230V a.c. predisposition for capacitor** — **20**



Power supply 230V a.c. 50/60 Hz
Contacts 10 A / 250 V a.c.
Mechanical - sequential operation
Available contacts:
2 contacts 4 sequences
Panel/recess mounting

Predisposition for fastening holes with screws
Predisposition for built-in capacitor
Dimensions (LxWxH) 35 x 22 x 45

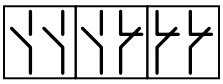


1RI 06110ACPC — **Electromechanical impulse relay with 110V a.c. predisposition for capacitor** — **20**



Power supply 110 V a.c. 50/60 Hz
Contacts 10 A / 250 V a.c.
Mechanical - sequential operation
Available contacts:
2 contacts 3 sequences
Panel/recess mounting

Predisposition for fastening holes with screws
Predisposition for built-in capacitor
Dimensions (LxWxH) 35 x 22 x 45

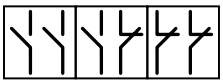


1RI 06230ACPC — **Electromechanical impulse relay with 230V a.c. predisposition for capacitor** — **20**



Power supply 230V a.c. 50/60 Hz
Contacts 10 A / 250 V a.c.
Mechanical - sequential operation
Available contacts:
2 contacts 3 sequences
Panel/recess mounting

Predisposition for fastening holes with screws
Predisposition for built-in capacitor
Dimensions (LxWxH) 35 x 22 x 45



1VA CPL002 — **Built-in capacitor for luminous push buttons** — **20**



Built-in capacitor to be used in impulse relays in case of systems with luminous push buttons

Dimensions (LxWxH) 35 x 22 x 17.5



IMPULSE RELAYS
1 DIN MODULAR
ELECTROMECHANICAL

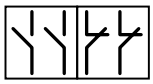
CODE	DESCRIPTION	PACKAGE

1RI 0212AC/M — **1 DIN Electromechanical impulse relay 12 V** — **10**



Power supply 12 V a.c. 50/60 Hz
Contacts 16 A / 250 V a.c.
Mechanical - sequential operation
Available contacts:
2 contacts 2 sequences
Installation on DIN rail

Control button
Dimensions (LxWxH) 17.5 x 60 x 90

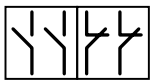


1RI 0224AC/M — **1 DIN Electromechanical impulse relay 24 V** — **10**



Power supply 24 V a.c. 50/60 Hz
Contacts 16 A / 250 V a.c.
Mechanical - sequential operation
Available contacts:
2 contacts 2 sequences
Installation on DIN rail

Control button
Dimensions (LxWxH) 17.5 x 60 x 90

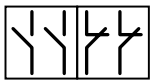


1RI 02230AC/M — **1 DIN Electromechanical impulse relay 230V** — **10**



Power supply 230V a.c. 50/60 Hz
Contacts 16 A / 250 V a.c.
Mechanical - sequential operation
Available contacts:
2 contacts 2 sequences
Installation on DIN rail

Control button
Dimensions (LxWxH) 17.5 x 60 x 90

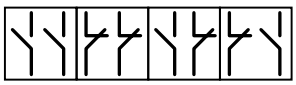


1RI 0412AC/M — **1 DIN Electromechanical impulse relay 12 V** — **10**



Power supply 12 V a.c. 50/60 Hz
Contacts 16 A / 250 V a.c.
Mechanical - sequential operation
Available contacts:
2 contacts 2 sequences
Installation on DIN rail

Control button
Dimensions (LxWxH) 17.5 x 60 x 90

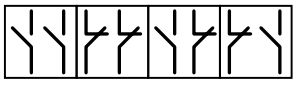


1RI 0424AC/M — **1 DIN Electromechanical impulse relay 24 V** — **10**



Power supply 24 V a.c. 50/60 Hz
Contacts 16 A / 250 V a.c.
Mechanical - sequential operation
Available contacts:
2 contacts 2 sequences
Installation on DIN rail

Control button
Dimensions (LxWxH) 17.5 x 60 x 90

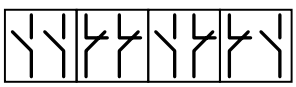


1RI 04230AC/M — **1 DIN Electromechanical impulse relay 230V** — **10**



Power supply 230V a.c. 50/60 Hz
Contacts 16 A / 250 V a.c.
Mechanical - sequential operation
Available contacts:
2 contacts 2 sequences
Installation on DIN rail

Control button
Dimensions (LxWxH) 17.5 x 60 x 90

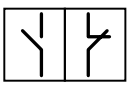


1RI 01230AC/E — **Electronic impulse relay for recess mounting or recess boxes for wiring devices 230V** — **20**



Power supply 230V a.c. 50/60 Hz
Contacts 10 A / 250 V a.c.
Electronical – sequential operation
Available contacts:
1 contact 2 sequences

Recess mounting / recessed boxes for wiring devices
Predisposition for 3 wire / 4 wire system
Dimensions (LxWxH) 21.5 x 49.9 x 40.5

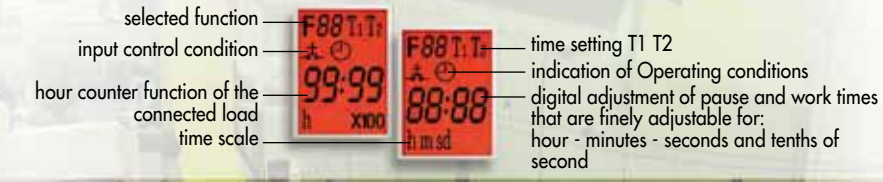


TIME RELAYS - MULTI-VOLTAGE - MULTIFUNCTION - MULTISCALE

- 14 functions available on the display
- double adjustment of pause and work times T1 and T2 that can be independently adjusted
- digital adjustment of work times in hours - minutes - seconds - tenths of seconds
- Amber colour backlit display
- hour counter of connected load

- 1 module devices for DIN rail mounting
- Devices for panel mounting 48 x 48
- 2 output relays for models with star-triangle starter

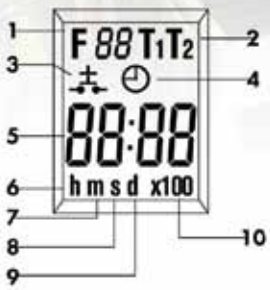




Programming ease with only 4 keys
(according to menu logic of mobile phones)



DISPLAY DESCRIPTION

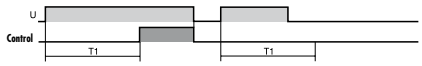


1 - Number of the selected function
2 - Timer 1 – Timer 2
3 - START input status (on/off)
4 - Timer in operation
5 - Time set for the timer/hour counter
6 - Hour(s)
7 - Minute(s)
8 - Second(s)
9 - Tenth(s)
10 - Operating hours multiplier

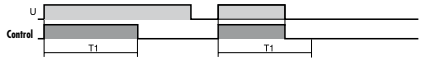
... Digital accuracy of preset time ... Backlit display ... Programming ease ...

14 AVAILABLE FUNCTIONS - FUNCTION DIAGRAMS

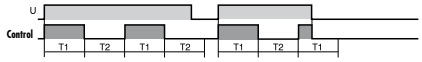
Function 01 Delay in energising



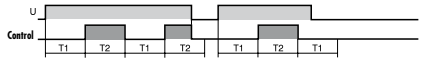
Function 02 Delay in passing to energising



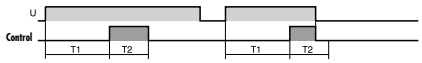
Function 03 Active relay start intermittent control



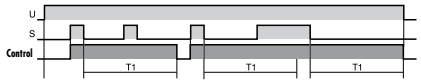
Function 04 Active ralay stop intermittent control



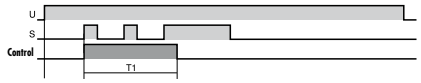
Function 05 Delayed fixed impulse



Function 06 De-energising delay (at command release)



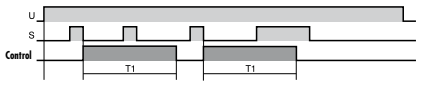
Function 07 Delay through energising(instantaneous at command)



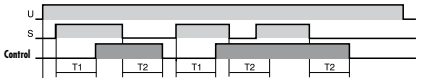
Symbol

U	=	**T1 power-supply voltage**
T_1 -T_2	=	**Set time**
S	=	**START control input**
Control	=	**Relay control output**
P_1 -P_2	=	**Pause times**
人 - △	=	**Star - Triangle**

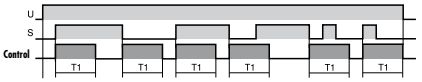
Function 08 Delay through energising (at comand release)



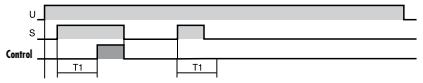
Function 09 De-energising and energising delay



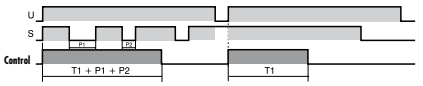
Function 10 Temporised control of energising and de-energising



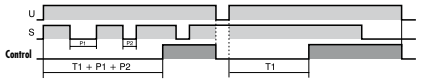
Function 11 Delayed activation, type 1



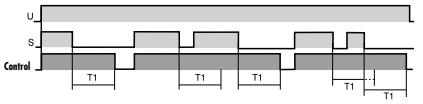
Function 12 Delayed activation, type 2



Function 13 Impulse-type



Function 14 Delay in de-energising - restorable



Function ST Star/triangle motor start



For art. 1RT 200/230/ST – 1RT 250/230/ST

CODE	DESCRIPTION	PACKAGE

1RT 200/MT/MF — **Multifunction, multi-voltage timer relay with display - 1 DIN** — **10**



Power supply 12 - 24 - 48 - 110 - 230V a.c. 50/60Hz
Controllable load (in AC1) 16 A / 250 V a.c.
Controllable load (in AC15) 3 A / 240V a.c.
Potential-free changeover contact
14 functions available in the display
Double timer T1, T2 independently adjustable
Backlit display, amber colour
Digital adjustment of work times, hours minutes seconds and tenths of seconds
Load operation hour counter
Dimensions (LxWxH) 17.5x60x90

1RT 200/230/MF — **Multifunction 230V timer relay with display - 1 DIN** — **10**



Power supply 230V a.c. 50/60Hz
Controllable load (in AC1) 16 A / 250 V a.c.
Controllable load (in AC15) 3 A / 240V a.c.
Potential-free changeover contact
14 functions available in the display
Double timer T1, T2 independently adjustable
Backlit display, amber colour
Digital adjustment of work times, hours minutes seconds and tenths of seconds
Load operation hour counter
Dimensions (LxWxH) 17.5x60x90

1RT 200/230/ST — **230V timer relay for star / triangle motor start with display - 1 DIN** — **10**



Power supply 230V a.c. 50/60Hz
Controllable load (in AC1) 5 A / 250 V a.c.
2 potential-free no contacts
Double output relay for servo controls
Double timer T1, T2 independently adjustable
Double adjustment times for relay coil connection and disconnection
Backlit display, amber colour
Digital adjustment of work times, hours minutes seconds and tenths of seconds
Load operation hour counter
Dimensions (LxWxH) 17.5x60x90

DIGITAL TIME RELAYS
48 X 48

CODE	DESCRIPTION	PACKAGE
1RT 250/MT/MF	**Multifunction, multi-voltage time relay with display, 48x48**	**10**



Power supply 12 - 24 - 48 - 110 - 230V a.c. 50/60Hz
Controllable load (in AC1) 16 A / 250 V a.c.
Controllable load (in AC15) 3 A / 240V a.c.
Potential-free changeover contact
14 functions available on the display
Double timer T1, T2 independently adjustable
Backlit display, amber colour
Digital adjustment of work times, hours minutes seconds and tenths of seconds
Load operation hour counter
Dimensions (LxWxH) 48x77x48

1RT 250/230/MF	**Multifunction 230V time relay with display, 48x48**	**10**



Power supply 230V a.c. 50/60Hz
Controllable load (in AC1) 16 A / 250 V a.c.
Controllable load (in AC15) 3 A / 240V a.c.
Potential-free changeover contact
14 functions available on the display
Double timer T1, T2 independently adjustable
Backlit display, amber colour
Digital adjustment of work times, hours minutes seconds and tenths of seconds
Load operation hour counter
Dimensions (LxWxH) 48x77x48

1RT 250/230/ST	**230V time relay for star / triangle motor start with display, 48x48**	**10**

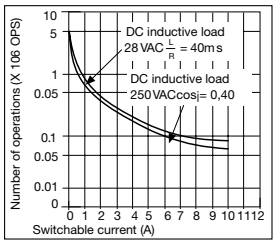


Power supply 230V a.c. 50/60Hz
Controllable load (in AC1) 5 A / 250 V a.c.
2 potential-free contacts
Double output relay for servo controls
Double timer T1, T2 independently adjustable
Double adjustment times for relay coil connection and disconnection
Backlit display, amber colour
Digital adjustment of work times, hours minutes seconds and tenths of seconds
Load operation hour counter
Dimensions (LxWxH) 48x77x48

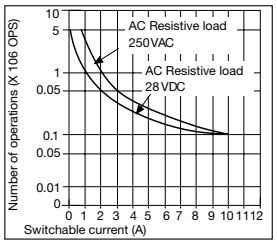


OCTAL / UNDECAL

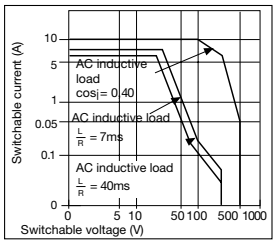
Electrical life



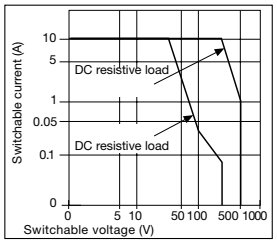
Electrical life



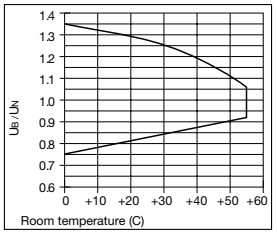
Max. load interruption power in AC/DC

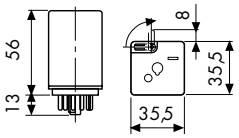


Max. load interruption power in AC/DC



Coil operation field





TECHNICAL SPECIFICATIONS

Main data

Type	OCTAL / UNDECAL
Power supply voltage	12 - 24 - 48 - 60V d.c. (mod DC) 12 - 24 - 48 - 110 - 230V c.a. (mod AC)
Rated load	10A/250Va.c. - 30V d.c.
Load in AC1	12A/250Va.c. - 30V d.c.
Max commutable power	2500VA / 300W
Max commutable voltage	250Vc.a. / 30V d.c.
Motor power	1/3 HP at 240V a.c.
Contact material	AG - CdO

Description

Use	tertiary / industrial
Type of outputs	potential-free changeover
Available contacts	2 changeover (2 x ⟷) OCTAL 3 changeover (3 x ⟷) UNDECAL
Dimensions (L x W x H) mm	21,5 x 28 x 36
Weight	37 g.

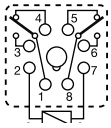
General data

Type of installation	on a base
Protection degree (IP)	IP 20
Electrical life (operations)	100.000
Mechanical life (operations)	10.000.000
Insulation resistance (500 V d.c.)	1.000 MΩ
Dielectric strength (open contacts)	750 V a.c.
Dielectric strength (contacts/coil)	3.750 V a.c.
Minimum load	100 mA / 5 V d.c.
Dissipated power	1.5 W (mod DC) 2.5 VA (mod AC)
Operating temperature limits from	de -55 a + 70 °C
Intervention time (with rated voltage)	25 msec max
Release time (with rated voltage)	25 msec max
Room temperature	-55 ÷ + 70 °C
Resistance to vibrations	10 ÷ 55 Hz 1.5 mm
Resistance to collisions (functional)	100 m/sec^2 /10 g
Resistance to collisions (destructive)	1.000 m/sec^2 /100 g
Humidity	35 % ÷ 95 %
Construction	dust-proof cover
Insulation rated voltage	250 V
Withstand voltage at rated imp.	2,2 KV
Pollution rating	2
Overvoltage category	III

Accessories

see list of accessories

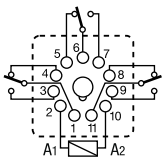
CODE	DESCRIPTION		PACKAGE
OCTAL RELAYS			
1RE 080212DC	**OCTAL industrial relay, 12V d.c.**		**25**
	Power supply 12V d.c.	2 changeover contacts 10A/250V	
1RE 080224DC	**OCTAL industrial relay, 24V d.c.**		**25**
	Power supply 24V d.c.	2 changeover contacts 10A/250V	
1RE 080248DC	**OCTAL industrial relay, 48V d.c.**		**25**
	Power supply 48V d.c.	2 changeover contacts 10A/250V	
1RE 080260DC	**OCTAL industrial relay, 60V d.c.**		**25**
	Power supply 60V d.c.	2 changeover contacts 10A/250V	
1RE 080212AC	**OCTAL industrial relay, 12V a.c.**		**25**
	Power supply 12V a.c.	2 changeover contacts 10A/250V	
1RE 080224AC	**OCTAL industrial relay, 24V a.c.**		**25**
	Power supply 24V a.c.	2 changeover contacts 10A/250V	
1RE 080248AC	**OCTAL industrial relay, 48V a.c.**		**25**
	Power supply 48V a.c.	2 changeover contacts 10A/250V	
1RE 0802110AC	**OCTAL industrial relay, 110V a.c.**		**25**
	Power supply 110V a.c.	2 changeover contacts 10A/250V	
1RE 0802230AC	**OCTAL industrial relay, 230V a.c.**		**25**
	Power supply 230V a.c.	2 changeover contacts 10A/250V	



Legenda for connection diagrams

A1 - A2 relay coil

UNDECAL RELAYS			
1RE 110312DC	**UNDECAL industrial relay, 12V d.c.**		**25**
	Power supply 12V d.c.	3 changeover contacts 10A/250V	
1RE 110324DC	**UNDECAL industrial relay, 24V d.c.**		**25**
	Power supply 24V d.c.	3 changeover contacts 10A/250V	
1RE 110348DC	**UNDECAL industrial relay, 48V d.c.**		**25**
	Power supply 48V d.c.	3 changeover contacts 10A/250V	
1RE 110360DC	**UNDECAL industrial relay, 60V d.c.**		**25**
	Power supply 60V d.c.	3 changeover contacts 10A/250V	
1RE 110312AC	**UNDECAL industrial relay, 12V a.c.**		**25**
	Power supply 12V a.c.	3 changeover contacts 10A/250V	
1RE 110324AC	**UNDECAL industrial relay, 24V a.c.**		**25**
	Power supply 24V a.c.	3 changeover contacts 10A/250V	
1RE 110348AC	**UNDECAL industrial relay, 48V a.c.**		**25**
	Power supply 48V a.c.	3 changeover contacts 10A/250V	
1RE 1103110AC	**UNDECAL industrial relay, 110V a.c.**		**25**
	Power supply 110V a.c.	3 changeover contacts 10A/250V	
1RE 1103230AC	**UNDECAL industrial relay, 230V a.c.**		**25**
	Power supply 230V a.c.	3 changeover contacts 10A/250V	



Legenda for connection diagrams

A1 - A2 relay coil

CODE	DESCRIPTION	PACKAGE

OCTAL / UNDECAL BASES

Bases OCTAL

1RE EK 8	**OCTAL socket, screw terminals**	**15**
1RE ES 8	**OCTAL socket, clamp teminals**	**15**
1RE ES 9	**OCTAL socket, clamp terminals with predisposition for protection modules**	**15**



UNDECAL bases

1RE EK 11	**UNDECAL socket, screw terminals**	**15**
1RE ES 11	**UNDECAL socket, clamp teminals**	**15**
1RE ES 12	**UNDECAL socket, clamp terminals with predisposition for protection modules**	**15**



GENERAL SPECIFICATIONS

Protection degree	IP 20
Electrical connection	1 ÷ 2,5 mm^2
Operating Temp.	- 40 ÷ 85 °C
Wall-mounted or installed on DIN rail	

PROTECTION MODULES

1RE 11	**Module with polarized diode –A1 +A2**	**10**
	for d.c. protection against overvoltage from open coil 6-230V d.	
1RE 21	**Module with polarized diode +A1 -A2**	**10**
	for d.c. protection against overvoltage from open coil 6-230V d.c.	
1RE 51B	**Module with RC**	**10**
	for a.c. protection against overvoltage from open coil 6-24V a.c.	
1RE 51D	**Module with RC**	**10**
	for a.c. protection against overvoltage from open coil 24-60V a.c.	
1RE 51C	**Module with RC**	**10**
	for a.c. protection against overvoltage from open coil 110-230V a.c.	
1RE 71	**Module with varistor**	**10**
	for protection against external overvoltage 24V a.c.	
1RE 71A	**Module with RC**	**10**
	for protection against external overvoltage 115V a.c.	
1RE 81	**Module with RC**	**10**
	for protection against external overvoltage 230V a.c.	

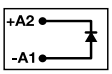


GENERAL SPECIFICATIONS

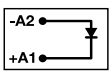
Protection degree	IP 20
Electrical connection	with quick coupling
Operating Temp.	- 40 ÷ 85 °C

MODULE DIAGRAMS

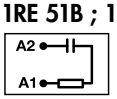
1RE 11



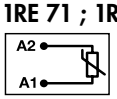
1RE 21



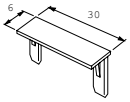
1RE 51B ; 1RE 51D ; 1RE 51C



1RE 71 ; 1RE 71A ; 1RE 81



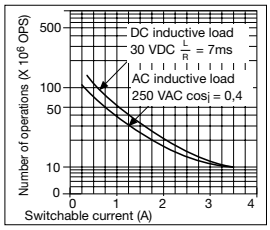
WIRING AUXILIARY DEVICES

1RE T 	**Writable plate for ES8 - ES11 for OCTAL - UNDECAL socket (thermoplastic material)**	**50**
1RE MH 1 	**Relay fastening spring for OCTAL - UNDECAL relays (metallic material)**	**50**

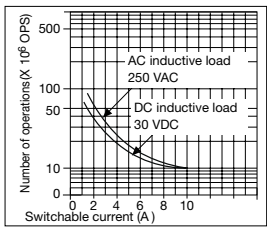



MIDI 2

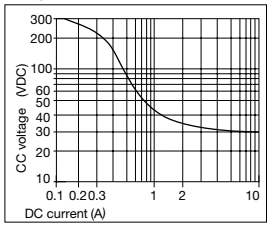
Electrical life



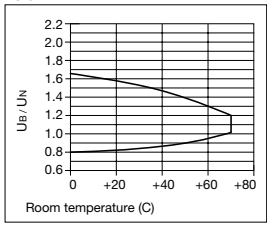
Electrical life

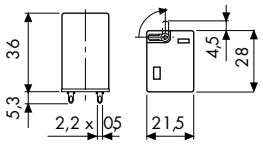


Max. power of load interruption in DC



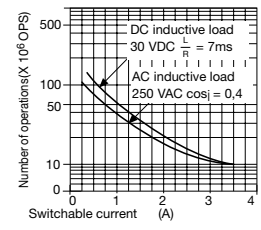
Coil operation field



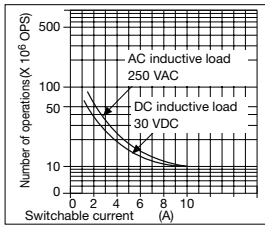


MIDI 4

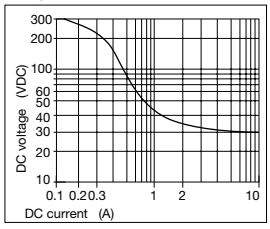
Electrical life



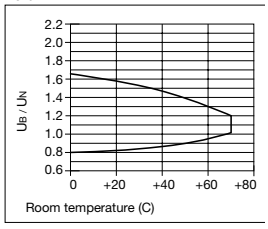
Electrical life

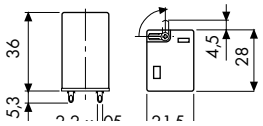


Max. power of load interruption in DC



Coil operation field

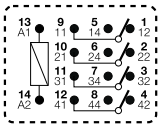




TECHNICAL SPECIFICATIONS

Main data		
Type	MIDI-2	
Power supply voltage	12 - 24 - 48 - 60V d.c. 12 - 24 - 48 - 110 - 230V a.c.	(mod DC) (mod AC)
Rated load	10A/250Va.c. - 30V d.c. 5A/250Va.c. - 30V d.c.	(MIDI-2) (MIDI-4)
Load in AC1	12A/250Va.c. - 30V d.c. 6A/250Va.c. - 30V d.c.	(MIDI-2) (MIDI-4)
Max commutable power	2500VA / 300W 1250VA / 300W	(MIDI-2) (MIDI-4)
Max commutable voltage	250Va.c. / 30V d.c.	
Motor power	1/3 HP a 240V a.c. 1/6 HP a 240V a.c.	(MIDI-2) (MIDI-4)
Contact material	AG - CdO	
Type of Operation	monostable	
Description		
Use	tertiary / industrial	
Type of outputs	potential-free changeover	
Available contacts	2 changeover (2 x ⟷) 4 changeover (3 x ⟷)	(MIDI-2) (MIDI- 4)
Dimensions (L x W x H) mm	21,5 x 28 x 36	
Weight	37 g.	
General data		
Type of installation	on socket	
Protection degree (IP)	IP 20	
Electrical life (operations)	100.000	
Mechanical life (operations)	10.000.000	
Insulation resistance (500 V d.c.)	1.000 MΩ	
Dielectric strength (open contacts)	750 V a.c. 1.550V a.c.	(MIDI-2) (MIDI-4)
Dielectric strength (contacts/coil)	3.750 V a.c.	
Minimum load	100 mA / 5 V d.c.	
Dissipated power	0.9 W 1.2 VA	(mod DC) (mod AC)
Operating temperature limits from	-55°C to +70°C	
Intervention time (with rated voltage)	25 msec max	
Release time (with rated voltage)	25 msec max	
Room temperature	-55 ÷ + 70 °C	
Resistance to vibrations	10 ÷ 55 Hz 1.5 mm	
Resistance to collisions (functional)	100 m/seg^2 /10 g	
Resistance to collisions (destructive)	1.000 m/seg^2 /100 g	
Humidity	35 % ÷ 95 %	
Construction	dust-proof cover	
Insulation rated voltage	250 V	
Withstand voltage at rated imp.	2,2 KV	
Pollution rating	2	
Overvoltage category	III	
Accessories		
see list of accessories		

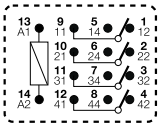
CODE	DESCRIPTION		PACKAGE
MIDI SERIES RELAYS, 2 CONTACTS			
1RE 021012DC	**MIDI industrial relay, 2 contacts, 12V d.c.**		**20**
	Power supply 12V d.c.	2 changeover contacts 10A/250V	
1RE 021024DC	**MIDI industrial relay, 2 contacts, 24V d.c.**		**20**
	Power supply 24V d.c.	2 changeover contacts 10A/250V	
1RE 021048DC	**MIDI industrial relay, 2 contacts, 48V d.c.**		**20**
	Power supply 48V d.c.	2 changeover contacts 10A/250V	
1RE 021012AC	**MIDI industrial relay, 2 contacts, 12V a.c.**		**20**
	Power supply 12V a.c.	2 changeover contacts 10A/250V	
1RE 021024AC	**MIDI industrial relay, 2 contacts, 24V a.c.**		**20**
	Power supply 24V a.c.	2 changeover contacts 10A/250V	
1RE 021048AC	**MIDI industrial relay, 2 contacts, 48V a.c.**		**20**
	Power supply 48V a.c.	2 changeover contacts 10A/250V	
1RE 0210110AC	**MIDI industrial relay, 2 contacts, 115/120V a.c.**		**20**
	Power supply 115/120V a.c.	2 changeover contacts 10A/250V	
1RE 0210230AC	**MIDI industrial relay, 2 contacts, 230V a.c.**		**20**
	Power supply 230V a.c.	2 changeover contacts 10A/250V	



Legenda for connection diagrams

A1 - A2 relay coil

MIDI SERIES RELAYS, 4 CONTACTS			
1RE 040512DC	**MIDI industrial relay, 4 contacts, 12V d.c.**		**20**
	Power supplyn 12V d.c.	4 changeover contacts 5A/250V	
1RE 040524DC	**MIDI industrial relay, 4 contacts, 24V d.c.**		**20**
	Power supply 24V d.c.	4 changeover contacts 5A/250V	
1RE 040548DC	**MIDI industrial relay, 4 contacts, 48V d.c.**		**20**
	Power supply 48V d.c.	4 changeover contacts 5A/250V	
1RE 040512AC	**MIDI industrial relay, 4 contacts, 12V a.c.**		**20**
	Power supply **12V** a.c.	4 changeover contacts 5A/250V	
1RE 040524AC	**MIDI industrial relay, 4 contacts, 24V a.c.**		**20**
	Power supply 24V a.c.	4 changeover contacts 5A/250V	
1RE 040548AC	**MIDI industrial relay, 4 contacts, 48V a.c.**		**20**
	Power supply 48V a.c.	4 changeover contacts 5A/250V	
1RE 0405110AC	**MIDI industrial relay, 4 contacts, 110V a.c.**		**20**
	Power supply 110V a.c.	4 changeover contacts 5A/250V	
1RE 0405230AC	**MIDI industrial relay, 4 contacts, 230V a.c.**		**20**
	Power supply 230V a.c.	4 changeover contacts 5A/250V	



Legenda for connection diagrams

A1 - A2 relay coil

CODE	DESCRIPTION	PACKAGE
MIDI SOCKETS, 2 - 4 CONTACTS		
MIDI 2 SOCKET - 2 CONTACTS		
1RE ES 15 /2B	socket with screw terminals for 2-changeover relay	10
1RE ES 15 /2N	socket with clamp terminals for 2-changeover relay	10
1RE ES 15 /2S	socket with clamp terminals for 2-changeover relay	10
MIDI 3 SOCKET - 3 CONTACTS		
1RE ES 15 /3N	socket with clamp terminals for 3-changeover relay	10
1RE ES 15 /3S	socket with clamp terminals for 3-changeover relay	10
MIDI 4 SOCKET - 4 CONTACTS		
1RE ES 15 /4B	socket with screw terminals for 4-changeover relay	10
1RE ES 15 /4N	socket with clamp terminals for 4-changeover relay	10
1RE ES 15 /4S	socket with clamp terminals for 4-changeover relay	10



GENERAL SPECIFICATIONS

Protection degree	IP 20
Electrical connection	1 ÷ 2,5 mm ^{2}
Operating Temp.	- 25 ÷ 85 °C
Wall-mounted or installed on DIN rail	
Presetting for protection modules	

PROTECTION MODULES

1RE 12	**Module with polarized diode –A1 +A2**	10
	for d.c. protection against overvoltage from open coil 6-230V d.c.	
1RE 22	**Module with polarized diode –A1 +A2**	10
	for d.c. protection against overvoltage from open coil 6-230V d.c.	
1RE 52B	**Module with RC**	10
	for a.c. protection against overvoltage from open coil 6-24V a.c.	
1RE 52D	**Module with RC**	10
	for a.c. protection against overvoltage from open coil 24-60V a.c.	
1RE 52C	**Module with RC**	10
	for a.c. protection against overvoltage from open coil 110-230V a.c.	
1RE 72	**Module with varistor**	10
	for protection against external overvoltage 24V a.c.	
1RE 72A	**Module with RC**	10
	for protection against external overvoltage 115V a.c.	
1RE 82	**Module with RC**	10
	for protection against external overvoltage 230V a.c.	

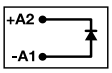


GENERAL SPECIFICATIONS

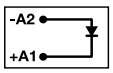
Protection degree	IP 20
Electrical connection	with quick coupling
Operating Temp.	- 25 ÷ 85 °C

MODULE DIAGRAMS

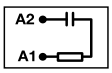
1RE 12



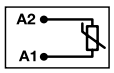
1RE 22



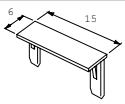
1RE 52B ; 1RE 52D ; 1RE 52C



1RE 72 ; 1RE 72A ; 1RE 82



WIRING AUXILIARY ACCESSORIES

1RE TR1	 **Plate for sockets type ES15/2B-4B-2N-3N-4N-2S-3S-4S (thermoplastic material)**	50
1RE MH0	 **Fastening spring for MIDI relays on sockets type ES15/2B-4B-2N-3N-4N-2S-3S-4S (metallic material)**	50
1RE MS35	 **Disconnection and fastening spring for MIDI relays on sockets type ES15/2N-3N-4N-2S-3S-4S (thermoplastic material)**	50

MEASURING INSTRUMENTS

AMMETERS
VOLTMETERS



SD02AV/2
SD03A/2
SD04V/2

SINGLE-PHASE
MULTIMETERS



SD05MM/2

THREE-PHASE
MULTIMETERS



SD10MT/2

CE marking standards:

LVD: 2006/95/CE *EN 61010-1, EN 60688*
EMC: 2004/108/CE *EN 61000-6-2, EN 61000-6-4, EN 55011*

CURRENT TRANSFORMERS

WOUND PRIMARY



TA00/10
TA00/25
TA00/40



TA02/50
TA02/60
TA02/100

THROUGH PRIMARY



TA03/40
TA03/50
TA03/60
TA03/100



TA04/150
TA04/200
TA04/250



TA05/400
TA05/500
TA05/600



TA06/800
TA06/1000

HOUR-COUNTERS

PANEL MOUNTING



2400
1100
2200
3800
CC1236

2 DIN



CO24/2
CO110/2
CO230/2
CO36C/2

CE marking standards:

LVD: 2006/95/CE *EN 61010-1*
EMC: 2004/108/CE *EN 61000-6-2, EN 61000-6-4*

SINGLE-PHASE ENERGY COUNTER	THREE-PHASE ENERGY COUNTER	PULSE CONCENTRATOR	NETWORK ANALYSER
			
SD05CEM/2 **SD06CEM/1**	**SD07CET/4** **SD08CET/4** **SD09CET/4**	**SD11CCE/4**	**SD31AR/4**

CE marking standards:

LVD: 2006/95/CE	*EN 62053-21, EN 50470-1, EN 50470-3*
EMC: 2004/108/CE	*EN 61000-6-2, EN 61000-6-4, EN 55011*

CE marking standards:

LVD: 2006/95/CE	*EN 60044-1*



CODE	DESCRIPTION		PACKAGE
1SD SD02AV/2	**Ammeter and voltmeter for alternate current measurements 2 DIN**		**4**
	Digital modular voltmeter and ammeter for alternate current measurements with 3-digit LED display Power supply 230V a.c. +-10% 50-60Hz Input current 5A a.c.	CAT III 300V Amperometric loads between 5 and 999 A with TA Reading accuracy class 0.5% Dimensions (LxWxH) 35 x 63 x 85	
1SD SD03A/2	**Ammeter for alternate current measurements 2 DIN**		**4**
	Digital modular ammeter for alternate current measurements with 3-digit LED display Power supply 230V a.c. +-10% 50-60Hz	Input current Inom= 5A Imax= 6A a.c. CAT III 300V Amperometric loads between 5 and 999 A with TA Reading accuracy class 0.5% Dimensions (LxWxH) 35 x 63 x 85	
1SD SD04V/2	**Voltmeter for alternate current measurements 2 DIN**		**4**
	Digital modular voltmeter for alternate current measurements with 3-digit LED display Power supply 230V a.c. +-10% 50-60Hz Input voltage 0..500V max a.c. (45...100Hz)	input impedance=1.5Mohm CAT III 300V Amperometric loads between 5 and 999 A with TA Reading accuracy class 0.5% Dimensions (LxWxH) 35 x 63 x 85	
1SD SD05MM/2	**Single-phase multimeter 2 DIN**		**4**
	Digital single-phase multimeter with 3-digit LED display on 2 lines Voltage measurement 0-230V Current measurement 0.1-26A (30A) Active Power Measurement 8.00kW Active Energy Measurement (Wh) on 2 lines	Accounting period 15 min Direct connection energy count 9.99 / 999 kWh Measurement of the power factor Hour counter Digital filter Dimensions (LxWxH) 35 x 63 x 85	
1SD SD10MT/2	**Three-phase multimeter 2 DIN**		**4**
	Digital three-phase multimeter with 3-digit LED display on 2 lines Phase-phase voltage VL1, VL2, VL3 Phase-neutral voltage VL1-N, VL2-N, VL3-N	Average VL phase average voltage Phase current I1, I2, I3 Phase average current I average Current in "len" neutral (<imbalance>) Basic active power Dimensions (LxWxH) 35 x 63 x 85	
1SD SD05CEM/2	**Single-phase energy counter 2 DIN**		**10**
	It records the consumption of ACTIVE energy in single-phase 230V systems, up to a maximum current of 30A with one open-collector 100ms impulsive output every 10W consumed Power supply 230V a.c. +-10% 50-60Hz Reading resolution 0.01 kWh	Accuracy Class A Number of digits: 5 integers + 2 decimals Rated voltage 230V Rated current 5A (30A max) EN50470-1, EN50470-3 and EN62059-41 standards Dimensions (LxWxH) 35 x 63 x 85	
1SD SD06CEM/1	**Single-phase energy counter 1 DIN**		**10**
	It records the consumption of ACTIVE energy in single-phase 230V systems, up to a maximum current of 30A with one open-collector 100ms impulsive output every 10W consumed Power supply 230V a.c. +-10% 50-60Hz Reading resolution 0.01 kWh	Accuracy Class A Number of digits: 5 integers + 2 decimals Rated voltage 230V Rated current 5A (30A max) EN50470-1, EN50470-3 and EN62059-41 standards Dimensions (LxWxH) 17.5 x 64.4 x 90	

CODE	DESCRIPTION	PACKAGE

1SD SD07CET/4 — **Three-phase energy counter 5/TA - 4 DIN** — **4**



It records the consumption of ACTIVE energy in three-phase 400V a.c. systems with neutral, with connection TA.../5° and the possibility to program the ratio, one programmable impulsive output, through a reed relay for the remote signalling of consumptions up to a maximum 30A current with one open-collector 100ms impulsive output every 10W consumed
Power supply 400 V +-10% auto-fed 50-60Hz

Reading resolution 0.01 kWh
Accuracy Class A
Number of digits: 6 integers + 1 decimal
Connection in TA (4 wires with neutral)
Rated voltage 3x230/400V
Rated current 5A (30A max)
EN50470-1, EN50470-3 and EN62059-41 standards
Dimensions (LxWxH) 70 x 63 x 85

1SD SD08CET/4 — **Three-phase energy counter 30A - 4 DIN** — **4**



It records the consumption of ACTIVE energy in three-phase 400V systems, up to the maximum current of 32A with one open-collector 100ms impulsive output every 100W consumed
Power supply 400 V +-10% 50-60Hz
Reading resolution 0.01 kWh
Accuracy Class A

Number of digits: 6 integers + 1 decimal
Connection in TA (4 wires with neutral)
Rated voltage 3x230/400V
Rated current 32A
EN50470-1, EN50470-3 and EN62059-41 standards
Dimensions (LxWxH) 70 x 63 x 85

1SD SD09CET/4 — **Three-phase energy counter 63A - 4 DIN** — **4**



It records the consumption of ACTIVE energy in three-phase 400V systems, up to the maximum current of 63A with one open-collector 100ms impulsive output every 100W consumed
Power supply 400 V +-10% 50-60Hz
Reading resolution 0.01 kWh
Accuracy Class A

Number of digits: 6 integers + 1 decimal
Connection in TA (4 wires with neutral)
Rated voltage 3x230/400V
Rated current 63A
EN50470-1, EN50470-3 and EN62059-41 standards
Dimensions (LxWxH) 70 x 63 x 85

1SD SD11CCE/4 — **Pulse concentrator, energy counter - 3 DIN** — **1**



Collects the impulses from energy counters (max 5), totals them, and puts them at disposal for a Master MODBUS.

Power supply 230V +/- 10% 50/60Hz
Inputs 5 with NO or NC free contact (programmable from software)
MODBUS RTU protocol input

Management software
Dimensions (LxWxH) 52.5x58x85

1SD SD31AR/4 — **Network analyser - 4 DIN** — **4**



It displays three-phase electrical measures for voltage, current, power, energy, frequency, hour counter. Equipped with back-lighting, alarm relay, set-point memory and energy.

Power supply 110V, 230V, 400V 50/60Hz
Voltmeter input
Amperometric input
Measurement: voltage, current, active power, reactive power, apparent power, active energy, reactive energy

16-digit white LED display
Programmable threshold alarm contact
Dimensions (LxWxH) 70x58x85

CODE	DESCRIPTION	PACKAGE
1TA TA00/10	**Wound primary current transformer 10/5 A**	**5**
	Accuracy class 0.5 Power 6VA Installation on DIN rail and/or wall-mounted Dimensions (LxWxH) 75 x 44 x 109	
1TA TA00/25	**Wound primary current transformer 25/5 A**	**5**
	Accuracy class 0.5 Power 6VA Installation on DIN rail and/or wall-mounted Dimensions (LxWxH) 75 x 44 x 109	
1TA TA00/40	**Wound primary current transformer 40/5 A**	**5**
	Accuracy class 0.5 Power 6VA Installation on DIN rail and/or wall-mounted Dimensions (LxWxH) 75 x 44 x 109	
1TA TA02/50	**Wound primary current transformer 50/5A**	**5**
	Accuracy class 0.5 Power 6VA Installation on DIN rail and/or wall-mounted Dimensions (LxWxH) 75 x 44 x 109	
1TA TA02/60	**Wound primary current transformer 60/5 A**	**5**
	Accuracy class 0.5 Power 6VA Installation on DIN guide and/or wall-mounted Dimensions (LxWxH) 75 x 44 x 109	
1TA TA02/100	**Wound primary current transformer 100/5 A**	**5**
	Accuracy class 0.5 Power 6VA Installation on DIN rail and/or wall-mounted Dimensions (LxWxH) 75 x 44 x 109	
1TA TA03/40	**Through primary current transformer 40/5 A**	**5**
	Accuracy class 3 Power 2VA Installation on DIN rail and/or wall-mounted Dimensions (LxWxH) 58 x 44 x 97	
1TA TA03/50	**Through primary current transformer 50/5 A**	**5**
	Accuracy class 3 Power 3A Installation on DIN rail and/or wall-mounted Dimensions (LxWxH) 58 x 44 x 97	
1TA TA03/60	**Through primary current transformer 60/5 A**	**5**
	Accuracy class 3 Power 3A Installation on DIN rail and/or wall-mounted Dimensions (LxWxH) 58 x 44	
1TA TA03/100	**Through primary current transformer 100/5 A**	**5**
	Accuracy class 1 Power 3A Installation on DIN rail and/or wall-mounted Dimensions (LxWxH) 58 x 44 x 97	

CODE	DESCRIPTION	PACKAGE
1TA TA04/150	**Through primary current transformer 150/5 A**	**5**
	Accuracy class 0.5 Power 3A Installation on DIN rail and/or wall-mounted Dimensions (LxWxH) 58 x 44 x 97	
1TA TA04/200	**Through primary current transformer 200/5 A**	**5**
	Accuracy class 0.5 Power 3A Installation on DIN rail and/or wall-mounted Dimensions (LxWxH) 58 x 44	
1TA TA04/250	**Through primary current transformer 250/5 A**	**5**
	Accuracy class 0.5 Power 5A Installation on DIN rail and/or wall-mounted Dimensions (LxWxH) 58 x 44 x 97	
1TA TA05/400	**Through primary current transformer 400/5 A**	**5**
	Accuracy class 0.5 Power 10A Installation on DIN rail and/or wall-mounted Dimensions (LxWxH) 75 x 44 x 109	
1TA TA05/500	**Through primary current transformer 500/5 A**	**5**
	Accuracy class 0.5 Power 10A Installation on DIN rail and/or wall-mounted Dimensions (LxWxH) 75 x 44 x 109	
1TA TA05/600	**Through primary current transformer 600/5 A**	**5**
	Accuracy class 0.5 Power 10A Installation on DIN rail and/or wall-mounted Dimensions (LxWxH) 75 x 44 x 109	
1TA TA06/800	**Through primary current transformer 800/5 A**	**5**
	Accuracy class 0.5 Power 10A Installation on DIN rail and/or wall-mounted Dimensions (LxWxH) 105 x 61 x 131	
1TA TA06/1000	**Through primary current transformer 1000/5 A**	**5**
	Accuracy class 0.5 Power 10A Installation on DIN rail and/or wall-mounted Dimensions (LxWxH) 105 x 61 x 131	

CODE	DESCRIPTION	PACKAGE
1CO 2400	**Hour counter 24 V a.c.**	**10**
	Power supply 24V a.c. 50Hz Recording ability 99,999.99 Installed in the panel / on the back of the switchboard Dimensions (LxWxH) 55 x 56 x 55	
1CO 1100	**Hour counter 110 V a.c.**	**10**
	Power supply 110V a.c. 50Hz Recording ability 99,999.99 Installed in the panel / on the back of the switchboard Dimensions (LxWxH) 55 x 56 x 55	
1CO 2200	**Hour counter 220 V a.c.**	**10**
	Power supply 220V a.c. 50Hz Recording ability 99,999.99 Installed in the panel / on the back of the switchboard Dimensions (LxWxH) 55 x 56 x 55	
1CO 3800	**Hour counter 380 V a.c.**	**10**
	Power supply 380V a.c. 50Hz Recording ability 99,999.99 Installed in the panel / on the back of the switchboard Dimensions (LxWxH) 55 x 56 x 55	
1CO CC1236	**Hour counter 12-36 V d.c.**	**10**
	Power supply 12-36V d.c. Recording ability 99,999.99 Installed in the panel / on the back of the switchboard Dimensions (LxWxH) 55 x 56 x 55	

CODE	DESCRIPTION	PACKAGE
1CO CO24/2	**Hour counter 24 V - 2 DIN**	**10**



Power supply 24V a.c. 50Hz <10VA
Recording ability 99,999.99
Accuracy class 0.5%
Reading accuracy 1/100h (36sec)
2 DIN module
Dimensions (LxWxH) 35 x 63 x 85

1CO CO110/2	**Hour counter 110V - 2 DIN**	**10**



Power supply 110V a.c. 50Hz <10VA
Recording ability 99,999.99
Accuracy class 0.5%
Reading accuracy 1/100h (36sec)
2 DIN module
Dimensions (LxWxH) 35 x 63 x 85

1CO CO230/2	**Hour counter 230V - 2 DIN**	**10**



Power supply 230V a.c. 50Hz <10VA
Recording ability 99,999.99
Accuracy class 0.5%
Reading accuracy 1/100h (36sec)
2 DIN module
Dimensions (LxWxH) 35 x 63 x 85

1CO CO36C/2	**Hour counter 12-36 V d.c. - 2 DIN**	**10**



Power supply 12-36V d.c. < 10VA
Recording ability 99,999.99
Accuracy class 1%
Reading accuracy 1/10h (6min)
2 DIN module
Dimensions (LxWxH) 35 x 63 x 85

TRANSFORMERS

INTERMITTENT SERVICE, 2 -3 DIN



To be installed
in switchboards

TR10SI/QOD
TR15SI/QOD
TR15SI/DDV
TR30SI/DDV

INTERMITTENT SERVICE, 2 - 3 DIN



For wall-mounting
and/or installation on a terminal
board and/or in switchboards

TR01402/N
TR01403/N
TR01409/N
TR01404/N
TR01435/N

CHIMES

CHIMES – DIN DON



4341 - 4351
4491 - 4481
4411 - 4421
4431 - 4441

BUZZERS – CHIMES 1 - 2 DIN



SU230/1 - SU 12/1
RZ230/1 - RZ12/1
TRSU/2 - TRRZ/2 - TRSURZ/2
SUE/2 - LE/2

CONTINUOUS SERVICE, 2 - 3 - 6 DIN





For wall-mounting
and/or installation on a terminal
board and/or in switchboards

TR010/QOD
TR010/DDV
TR015/QOD
TR015/DDV
TR024/DDV
TR030/DDV
TR040/DDV

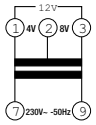
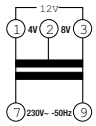
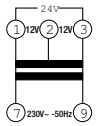
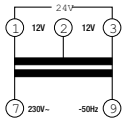
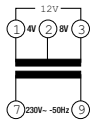
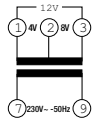
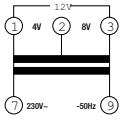
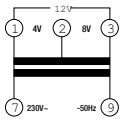
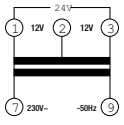
TR063/DDV

	CE marking standards:
LVD: 2006/95/CE	*EN 61558-1,* *EN 61558-2-6 (for general use)* *EN 61558-2-8 (for doorbells)*

	CE marking standards:
LVD: 2006/95/CE	*EN 60669-1, EN 61558-1*
EMC: 2004/108/CE	*EN 60669-1*



TRANSFORMERS
FOR INTERMITTENT SERVICE

CODE	DESCRIPTION		PACKAGE
1TD TR10SI/QOD	**10VA transformer for intermittent service, outputs 4-8-12V 2 DIN**		**36**
	Power supply 230V a.c. – 50Hz Outputs 4-8-12V Installation on terminal board IP20	Installation on the rear of the switchboard IP40 Dimensions (LxWxH) 35 x 60 x 90	
1TD TR15SI/QOD	**15VA transformer for intermittent service, outputs 4-8-12V 2 DIN**		**36**
	Power supply 230V a.c. – 50Hz Outputs 4-8-12V Installation on terminal board IP20	Installation on the rear of the switchboard IP40 Dimensions (LxWxH) 35 x 60 x 90	
1TD TR15SI/DDV	**15VA transformer for intermittent service, outputs 12-12-24V 2 DIN**		**36**
	Power supply 230V a.c. – 50Hz Outputs 12-12-24V Installation on terminal board IP20	Installation on the rear of the switchboard IP40 Dimensions (LxWxH) 35 x 60 x 90	
1TD TR30SI/DDV	**30VA transformer for intermittent service, outputs 12-12-24V 3 DIN**		**20**
	Power supply 230V a.c. – 50Hz Outputs 12-12-24V Installation on terminal board IP20	Installation on the rear of the switchboard IP40 Dimensions (LxWxH) 52.5 x 60 x 90	
1TD TR01402/N	**10VA transformer for intermittent service, outputs 4-8-12V, wall-mounted**		**30**
	Power supply 230V a.c. – 50Hz Outputs 4-8-12V Installation on terminal board IP20 Wall-mounted IP30	Installation on the rear of the switchboard IP40 Dimensions (LxWxH) 35 x 60 x 128	
1TD TR01403/N	**15VA transformer for intermittent service, outputs 4-8-12V, wall-mounted**		**30**
	Power supply 230V a.c. – 50Hz Outputs 4-8-12V Installation on terminal board IP20 Wall-mounted IP30	Installation on the rear of the switchboard IP40 Dimensions (LxWxH) 35 x 60 x 128	
1TD TR01409/N	**20VA transformer for intermittent service, outputs 4-8-12V, wall-mounted**		**20**
	Power supply 230V a.c. – 50Hz Outputs 4-8-12V Installation on terminal board IP20 Wall-mounted IP30	Installation on the rear of the switchboard IP40 Dimensions (LxWxH) 52.5 x 60 x 128	
1TD TR01404/N	**25VA transformer for intermittent service, outputs 4-8-12V, wall-mounted**		**20**
	Power supply 230V a.c. – 50Hz Outputs 4-8-12V Installation on terminal board IP20 Wall-mounted IP30	Installation on the rear of the switchboard IP40 Dimensions (LxWxH) 52.5 x 60 x 128	
1TD TR01435/N	**40VA transformer for intermittent service, outputs 12-12-24V, wall-mounted**		**20**
	Power supply 230V a.c. – 50Hz Outputs 12-12-24V Installation on terminal board IP20 Wall-mounted IP30	Installation on the rear of the switchboard IP40 Dimensions (LxWxH) 52.5 x 60 x 128	

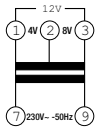
TRANSFORMERS
FOR CONTINUOUS SERVICE

CODE	DESCRIPTION	PACKAGE
1TD TR010/QOD	**10VA transformer for continuous service, outputs 4-8-12V 2 DIN**	**30**



Power supply 230V a.c. – 50Hz
Outputs 4-8-12V
Installation on terminal board IP20
Wall-mounted IP30

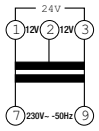
Installation on the rear of the switchboard IP40
Dimensions (LxWxH) 35 x 60 x 128



1TD TR010/DDV	**10VA transformer for continuous service, outputs 12-12-24V 2 DIN**	**30**

Power supply 230V a.c. – 50Hz
Outputs 12-12-24V
Installation on terminal board IP20
Wall-mounted IP30

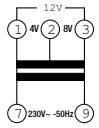
Installation on the rear of the switchboard IP40
Dimensions (LxWxH) 35 x 60 x 128



1TD TR015/QOD	**15VA transformer for continuous service, outputs 4-8-12V 2 DIN**	**30**

Power supply 230V a.c. – 50Hz
Outputs 4-8-12V
Installation on terminal board IP20
Wall-mounted IP30

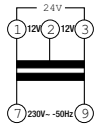
Installation on the rear of the switchboard IP40
Dimensions (LxWxH) 35 x 60 x 128



1TD TR015/DDV	**15VA transformer for continuous service, outputs 12-12-24V 2 DIN**	**30**

Power supply 230V a.c. – 50Hz
Outputs 12-12-24V
Installation on terminal board IP20
Wall-mounted IP30

Installation on the rear of the switchboard IP40
Dimensions (LxWxH) 35 x 60 x 128

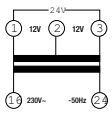


1TD TR024/DDV	**24VA transformer for continuous service, outputs 12-12-24V 3 DIN**	**20**



Power supply 230V a.c. – 50Hz
Outputs 12-12-24V
Installation on terminal board IP20
Wall-mounted IP30

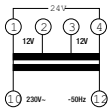
Installation on the rear of the switchboard IP40
Dimensions (LxWxH) 52.5 x 60 x 128



1TD TR030/DDV	**30VA transformer for continuous service, outputs 12-12-24V 3 DIN**	**20**

Power supply 230V a.c. – 50Hz
Outputs 12-12-24V
Installation on terminal board IP20
Wall-mounted IP30

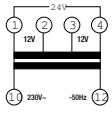
Installation on the rear of the switchboard IP40
Dimensions (LxWxH) 52.5 x 60 x 128



1TD TR040/DDV	**40VA transformer for continuous service, outputs 12-12-24V 3 DIN**	**10**

Power supply 230V a.c. – 50Hz
Outputs 12-12-24V
Installation on terminal board IP20
Wall-mounted IP30

Installation on the rear of the switchboard IP40
Dimensions (LxWxH) 52.5 x 60 x 128

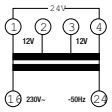


1TD TR063/DDV	**63VA transformer for continuous service, outputs 12-12-24V 6 DIN**	**10**



Power supply 230V a.c. – 50Hz
Outputs 12-12-24V
Installation on terminal board IP20
Wall-mounted IP30

Installation on the rear of the switchboard IP40
Dimensions (LxWxH) 105 x 60 x 128



CODE	DESCRIPTION		PACKAGE
1SU 4341	**Shrill chime 12V**		**60**
	Power supply 12V a.c. Wall-mounted / semi-recessed installation in a round box	Dimensions (DxW) 80 x 44	
1SU 4351	**Shrill chime 230V**		**60**
	Power supply 230V a.c. Wall-mounted / semi-recessed installation in a round box	Dimensions (DxW) 80 x 44	
1SU 4491	**Din Don 12V**		**36**
	Power supply 12V a.c. Wall-mounted	Dimensions (LxWxH) 150 x 47 x 92	
1SU 4481	**Din Don 230V**		**36**
	Power supply 230V a.c. Wall-mounted	Dimensions (LxWxH) 150 x 47 x 92	
1SU 4411	**Din Don 12-230V**		**36**
	Power supply 12-230V a.c. Wall-mounted	Dimensions (LxWxH) 150 x 47 x 92	
1SU 4421	**Din Don 230V with buzzer 230V**		**36**
	Power supply 230V a.c. Wall-mounted	Dimensions (LxWxH) 150 x 47 x 92	
1SU 4431	**Din Don 12V with buzzer 12V**		**36**
	Power supply 12V a.c. Wall-mounted	Dimensions (LxWxH) 150 x 47 x 92	
1SU 4441	**Din Don 12V with buzzer 12V and transformer 230-12V for low voltage control**		**36**
	Power supply 230V a.c. Wall-mounted	Dimensions (LxWxH) 150 x 47 x 92	

BUZZERS
CHIMES, 1 - 2 DIN

CODE	DESCRIPTION		PACKAGE
1SU RZ230/1	**Buzzer 230V a.c. - 1 DIN**		**10**
	Power supply 230V a.c. +-10% 50-60Hz Sound power of the buzzer 80 dB at 1 metre	Consumption 10VA Intermittent operation Protection degree IP20 IP40 Dimensions (LxWxH) 17.5 x 63 x 85	
1SU RZ12/1	**Buzzer 12V a.c. - 1 DIN**		**10**
	Power supply 12V a.c. +-10% 50-60Hz Sound power of the buzzer 80 dB at 1 metre	Consumption 5VA Intermittent operation Protection degree IP20 IP40 Dimensions (LxWxH) 17.5 x 63 x 85	
1SU SU230/1	**Chime 230V a.c. - 1 DIN**		**10**
	Power supply 230V a.c. +-10% 50-60Hz Sound power of the chime 84 dB at 1 metre	Consumption 10VA Intermittent operation Protection degree IP20 IP40 Dimensions (LxWxH) 17.5 x 63 x 85	
1SU SU12/1	**Chime 12V a.c. - 1 DIN**		**10**
	Power supply 12V a.c. +-10% 50-60Hz Sound power of the chime 84 dB at 1 metre	Consumption 5VA Intermittent operation Protection degree IP20 IP40 Dimensions (LxWxH) 17.5 x 63 x 85	
1SU TRSU/2	**Transformer with chime 230V a.c. - 2 DIN**		**10**
	Power supply 230V a.c. +-10% 50Hz Secondary voltage 24V a.c. Power in the secondary 24V 6,1VA Sound power	of the chime 80 dB at 1 metre Intermittent operation Protection degree IP20 IP40 Dimensions (LxWxH) 35 x 63 x 85	
1SU TRRZ/2	**Transformer with buzzer 230V a.c. - 2 DIN**		**10**
	Power supply 230V a.c. +-10% 50Hz Secondary voltage 24V a.c. Power in the secondary 24V 6,1VA Sound power	of the buzzer 70 dB at 1 metre Intermittent operation Protection degree IP20 IP40 Dimensions (LxWxH) 35 x 63 x 85	
1SU TRSURZ/2	**Transformer with chime and buzzer 230V a.c. - 2 DIN**		**10**
	Power supply 230V a.c. +-10% 50Hz Secondary voltage 24V a.c. Power in the secondary 24V 3.8VA + 3.8VA Sound power	of the chime 80 dB at 1 metre Sound power of the buzzer 70 dB at 1 metre Intermittent operation Protection degree IP20 IP40 Dimensions (LxWxH) 35 x 63 x 85	
1SU SUE/2	**Electronic 3-tone chime 230V a.c. - 2 DIN**		**10**
	Power supply 230V a.c. +-10% 50-60Hz Driving with button in low voltage 3 different sounds: din din bell, buzzer, siren	3 different inputs Sound power of the chime 80 dB at 1 metre Intermittent operation Protection degree IP20 IP40 Dimensions (LxWxH) 35 x 63 x 85	
1SU LE/2	**Emergency static lamp - 2 DIN**		**10**
	Power supply 230V a.c. 50-60Hz Static light element Useful lighting endurance 2 hours	Recharge time 2 hours Protection degree IP20 IP40	

LEVEL REGULATORS

ELECTROMECHANICAL - SMART



RLG01/3PVC - RLG02/5PVC
RLG03/10PVC - RLG04/15PVC
RLG05/20PVC - RLG06/25PVC
RLG025NEOP
RLG0310NEOP
RLG0520NEOP

The **SMART** level regulator is a floating switch for the management of liquid level. It allows connecting electrical appliances (usually pumps, but also solenoid valves, alarms, motordriven shutters, etc.) when reaching a preset level.
Made with non-toxic polypropylene: it can be used also in contact with food liquids.

LEVEL REGULATORS

ELECTRONIC



RLE024/2 - RLE230/2

ELECTRONIC SERIES E (EVOLVED)



RLEME/3 - RLE230E/2

They are regulators for conductive liquids, suitable to control minimum and maximum levels of deep wells, reservoirs, tanks, etc.
The Operating principle is based on the detection, by the control unit, of liquid resistance, whose level is controlled by means of specific probes being installed in the same device; the longest probe is used as common item.
When the level of the liquid inside the container or the well soaks the three submerged probes (common, low, high), the relay will be activated. The same relay will be deactivated only when the level lowers and uncovers the low probe.

LEVEL REGULATORS

ELECTROMECHANICAL - MAC5



RLG10/5PVC
RLG11/10PVC
RLG12/20PVC
RLG20/5NEOP
RLG21/10NEOP
RLG22/20NEOP

	CE marking standards:
LVD: 2006/95/CE	*EN 60730-1, EN 60730-2-16*

MAC5 is a tilting submerged level regulator. Its crucial feature is that it has a heavy and voluminous body, free from unevenness, which enhances its use in sewer water, industrial water with suspended agglomerate residues and turbulent water. This regulator includes a case, inside of which there is a floating switch that is counterbalanced, so that when the level increases, the position of the regulator will reverse. While the level is reducing, the regulator will tilt in the opposite direction. The high-pressure cast polypropylene body assures a perfect sealing against seepages.

ACCESSORIES

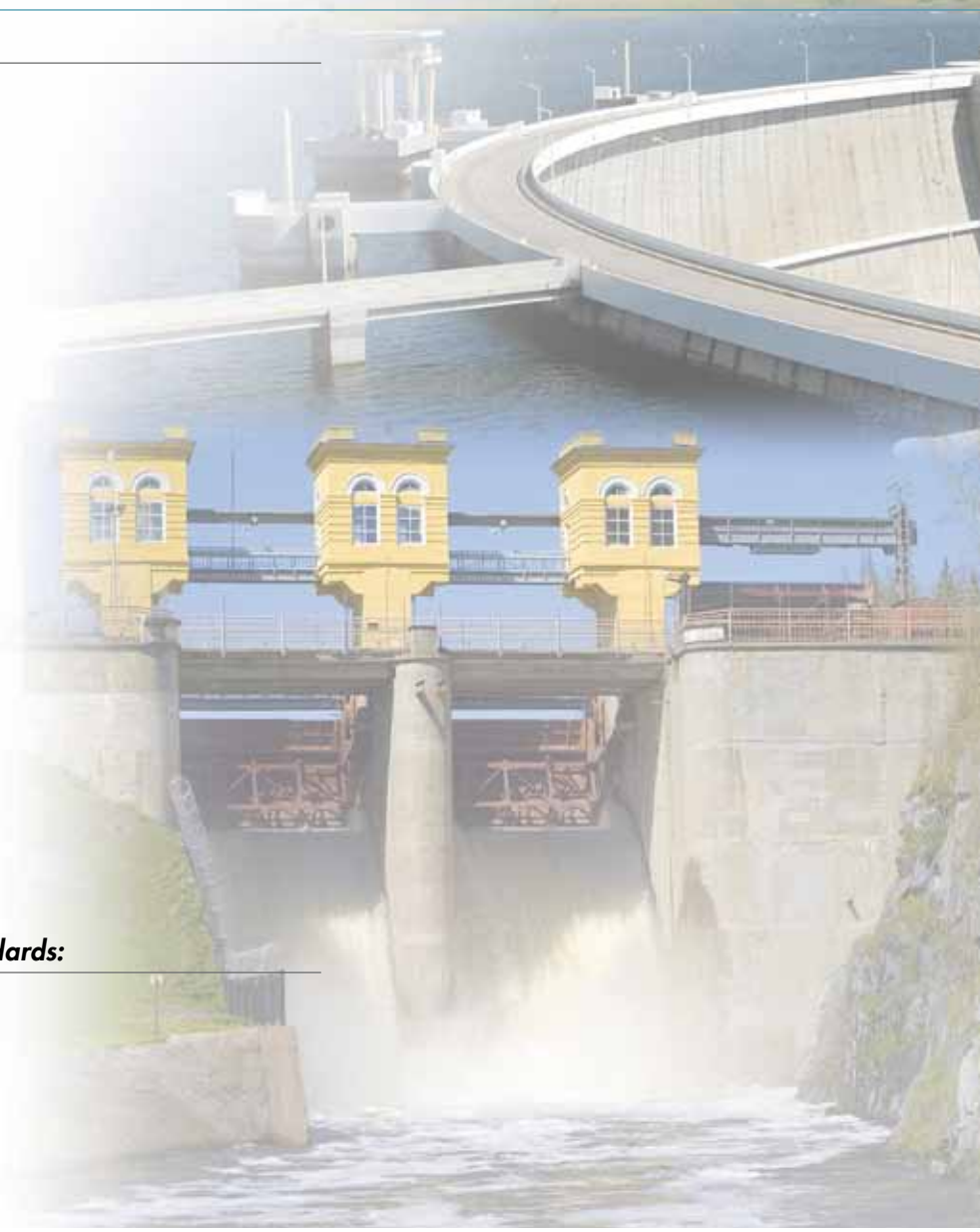


SF010

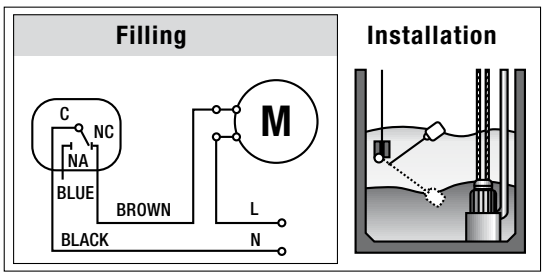


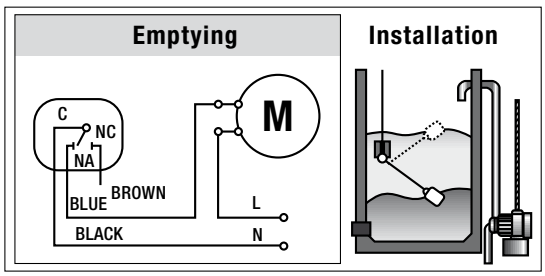
ST021

	CE marking standards:
LVD: 2006/95/CE	*EN 60730-1*
EMC: 2004/108/CE	*EN 55014-1, EN 55014-2, EN 61000-3-2, EN 61000-3-3*



CODE	DESCRIPTION	PACKAGE
1CL RLG01/3PVC	**Floating level regulator for clear water, PVC cable 3x1, 3m long**	**10**
	Electric range 10 (8) A / 250 V Operating Temperature 0-50°C Pressure resistance 1.5 BAR Protection degree IP68	
1CL RLG02/5PVC	**Floating level regulator for clear water, PVC cable 3x1, 5m long**	**10**
	Electric range 10 (8) A / 250 V Operating Temperature 0-50°C Pressure resistance 1.5 BAR IP68	
1CL RLG03/10PVC	**Floating level regulator for clear water, PVC cable 3x1, 10m long**	**10**
	Electric range 10 (8) A / 250 V Operating Temperature 0-50°C Pressure resistance 1.5 BAR IP68	
1CL RLG04/15PVC	**Floating level regulator for clear water, PVC cable 3x1, 15m long**	**10**
	Electric range 10 (8) A / 250 V Operating Temperature 0-50°C Pressure resistance 1.5 BAR IP68	
1CL RLG05/20PVC	**Floating level regulator for clear water, PVC cable 3x1, 20m long**	**10**
	Electric range 10 (8) A / 250 V Operating Temperature 0-50°C Pressure resistance 1.5 BAR IP68	
1CL RLG06/25PVC	**Floating level regulator for clear water, PVC cable 3x1, 25m long**	**10**
	Electric range 10 (8) A / 250 V Operating Temperature 0-50°C Pressure resistance 1.5 BAR IP68	
1CL RLG025NEOP	**Floating level regulator for clear water, neoprene cable 3x1, 5m long**	**10**
	Electric range 10 (8) A / 250 V Operating Temperature 0-50°C Pressure resistance 2 BAR IP68	
1CL RLG0310NEOP	**Floating level regulator for clear water, neoprene cable 3x1, 10m long**	**10**
	Electric range 10 (8) A / 250 V Operating Temperature 0-50°C Pressure resistance 2 BAR IP68	
1CL RLG0520NEOP	**Floating level regulator for clear water, neoprene cable 3x1, 20m long**	**10**
	Electric range 10 (8) A / 250 V Operating Temperature 0-50°C Pressure resistance 2 BAR IP68	





CODE	DESCRIPTION	PACKAGE
1CL RLG10/5PVC	**Floating level regulator for sewage water, PVC cable 3x1, 5m long**	**10**



Electric range 10 (8) A / 250 V — resistance 2 BAR
Operating Temperature 0-50°C Pressure — IP68

1CL RLG11/10PVC	**Floating level regulator for sewage water, PVC cable 3x1, 10m long**	**10**

Electric range 10 (8) A / 250 V — resistance 2 BAR
Operating Temperature 0-50°C Pressure — IP68

1CL RLG12/20PVC	**Floating level regulator for sewage water, PVC cable 3x1, 20m long**	**10**

Electric range 10 (8) A / 250 V — resistance 2 BAR
Operating Temperature 0-50°C Pressure — IP68

1CL RLG20/5NEOP	**Floating level regulator for sewage water, neoprene cable 3x1, 5m long**	**10**

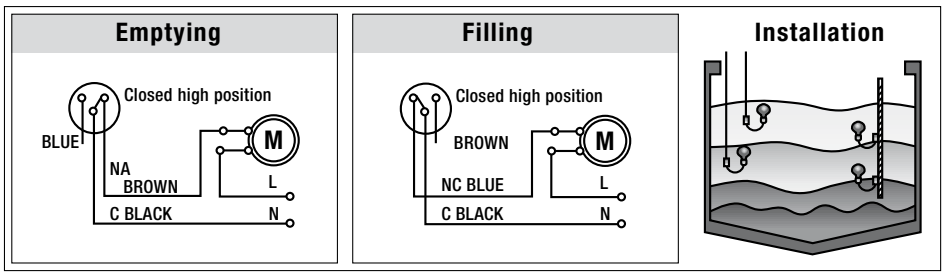
Electric range 10 (8) A / 250 V — resistance 2 BAR
Operating Temperature 0-50°C Pressure — IP68

1CL RLG21/10NEOP	**Floating level regulator for sewage water, neoprene cable 3x1, 10m long**	**10**

Electric range 10 (8) A / 250 V — resistance 2 BAR
Operating Temperature 0-50°C Pressure — IP68

1CL RLG22/20NEOP	**Floating level regulator for sewage water, neoprene cable 3x1, 20m long**	**10**

Electric range 10 (8) A / 250 V — resistance 2 BAR
Operating Temperature 0-50°C Pressure — IP68



CODE	DESCRIPTION	PACKAGE

1CL RLE024/2 — **Electronic level regulator 24V - 2 DIN** — **10**



Power supply 24V 50-60 Hz
Electrode voltage 12V
Relay range 5A / 250 V
Adjustable sensitivity
Max. connection length between control unit and probes, approx. 70-80m

Installation on terminal board IP20
Installation on the rear of the switchboard IP40
Dimensions (LxWxH) 37 x 58 x 95

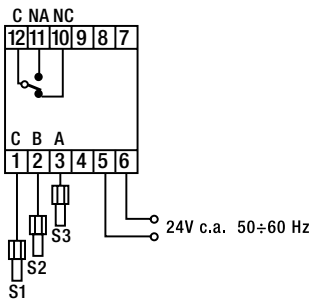
1CL RLE230/2 — **Electronic level regulator 230V - 2 DIN** — **10**



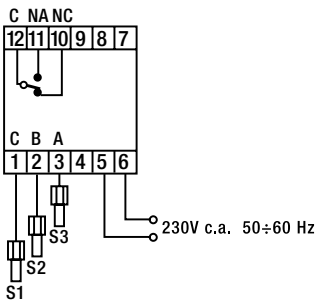
Power supply 230V 50-60 Hz
Electrode voltage 12V
Relay range 5A / 250 V
Adjustable sensitivity
Max. connection length between control unit and probes, approx. 70-80m

Installation on terminal board IP20
Installation on the rear of the switchboard IP40
Dimensions (LxWxH) 37 x 58 x 95

1CL RLE024/2



1CL RLE230/2



CODE	DESCRIPTION	PACKAGE

1CL RLEME/3 — **Multivoltage electronic level regulator series E evolved - 3 DIN** — **10**



Power supply 24/117/230V 50-60 Hz
Electrode voltage 12Vpp
Range of 1st relay 5A / 250 V
Range of 2nd relay 2A / 250 V
Adjustable intervention delay 0 - 16sec
Emptying / filling intervention mode
Max. connection length between control unit and probes, approx. 1000m

Installation on terminal board IP20
Installation on the rear of the switchboard IP40
Dimensions (LxWxH) 53 x 58 x 95

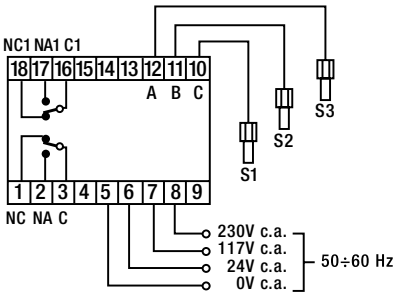
1CL RLE230E/2 — **Electronic level regulator 230V series E evolved - 2 DIN** — **10**



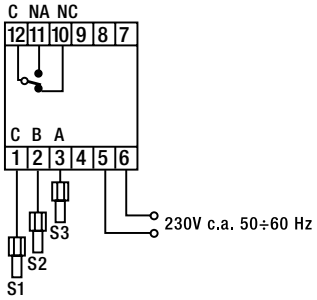
Power supply 230V 50-60 Hz
Electrode voltage 12Vpp
Relay range 5A / 250 V
Adjustable intervention delay 0 - 16sec
Emptying / filling intervention mode
Max. connection length between control unit and probes, approx. 1000m

Installation on terminal board IP20
Installation on the rear of the switchboard IP40
Dimensions (LxWxH) 37 x 58 x 95

1CL RLEME/3



1CL RLE230E/2



ACCESSORIES

1CL SF010 — **Probe with electronic wire connection** — **1**



Installation directly in the liquid
Max. operating temperatures 80°C
Dimensions (DxL) 22x85

1CL ST021 — **3-conductor probe holder** — **1**



Installation hole D 65mm
Max. operating temperatures 80°C
Dimensions (DxL) 80x72

HAND DRYERS / HAIRDRYERS

HAND DRYERS



ASM01N
ASE02N



ASE03



AMP03
AMF04

LIQUID SOAP DISPENSER



DS008

DISPENSER - PAPER TISSUE SET



DC009

HAIRDRYERS



ACP06



ACT10
ACT11
ACT12



ACPH13



CE marking standards:

LVD: 2006/95/CE	***EN 60335-1**, EN 60335-2-23*
EMC: 2004/108/CE	*EN 55014-1, EN 55014-2, EN 61000-3-2, EN 61000-3-3*

CODE	DESCRIPTION	PACKAGE

1DC ASM01N — **Push button hand dryer** — **4**



Power supply 230V a.c. 50-60Hz
Induction motor
Power 1750 W
Air volume 3000 litres/minute
Insulation class I

Air temperature 65°C at 10cm
Noise level 70 dB (A) at 1m
Dimensions (LxWxH) 200 x 200 x 240

1DC ASE02N — **Automatic hand dryer controlled by photocell** — **4**



Power supply 230V a.c. 50-60Hz
Induction motor
Power 1750 W
Air volume 3000 litres/minute
Insulation class I

Air temperature 65°C at 10cm
Noise level 70 dB (A) at 1m
Dimensions (LxWxH) 200 x 200 x 240

1DC ASE03 — **Automatic hand dryer in enameled steel controlled by photocell, series "AERIS"** — **4**



Power supply 230V a.c. 50-60Hz
Induction motor
Power 1640 W
Air volume 2500 litres/minute
Insulation class II

Noise level 70 dB (A) at 1m
Dimensions (LxWxH) 262 x 167 x 310

1DC AMP03 — **Push button hand dryer, series "EOLO"** — **4**



Power supply 230V a.c. 50-60Hz
Commutator motor
Power 1500 W
Air volume 1450 litres/minute
Insulation class II

Air temperature 67°C at 10cm
Noise level 75 dB (A) at 1m
Dimensions (LxWxH) 133 x 26 x 280

1DC AMF04 — **Automatic hand dryer controlled by photocell, series "EOLO"** — **4**



Power supply 230V a.c. 50-60Hz
Commutator motor
Power 1500 W
Air volume 1450 litres/minute
Insulation class II

Air temperature 67°C at 10cm
Noise level 75 dB (A) at 1m
Dimensions (LxWxH) 133 x 26 x 280

1DC ACP06 — **Push button hairdryer series "EOLO"** — **4**



Power supply 230V a.c. 50-60Hz
Commutator motor
Power 750 W
Air volume 1050 litres/minute
Insulation class II

Air temperature 56°C at 10cm
Noise level 75 dB (A) at 1m
Dimensions (LxWxH) 133 x 26 x 280

CODE	DESCRIPTION	PACKAGE

1DC ACT10 — **Nozzle hair dryer series "EOLO"** — **4**



Power supply 230V a.c. 50-60Hz
Commutator motor
Power 750 W
Air volume 1050 litres/minute
Insulation class II
Air temperature 71°C at 10 cm
Noise level 72 dB (A) at 1m
Dimensions (LxWxH)
206 x 133 x 280+350 tube

1DC ACT11 — **Nozzle temporised hair dryer series "EOLO"** — **4**



Power supply 230V a.c. 50-60Hz
Commutator motor
Power 750 W
Air volume 1050 litres/minute
Insulation class II
Air temperature 71°C at 10 cm
Timing approx. 7 min.
Noise level 72 dB (A) at 1m
Dimensions (LxWxH)
206 x 133 x 280+350 tube

1DC ACT12 — **Nozzle temporised hair dryer with shaver socket series "EOLO"** — **4**



Power supply 230V a.c. 50-60Hz
Commutator motor
Power 750 W
Air volume 1050 litres/minute
Insulation class II
Air temperature 71°C at 10 cm
Timing approx. 7 min.
Noise level 72dB (A) at 1m
Dimensions (LxWxH)
206 x 133 x 280+350 tube

1DC ACPH13 — **Hair dryer for hotels** — **6**



Power supply 230V a.c. 50-60Hz
Power 1200 W
on/off button
1 temperature position/air flow
Dimensions (LxWxH)
230 x 115 x 215+145 cable

1DC DS008 — **Liquid soap dispenser** — **4**



Manual operation
Capacity 1l
Wall-mounted
Dimensions (LxWxH) 130 x 95 x 275

1DC DC009 — **Paper tissue dispenser** — **4**

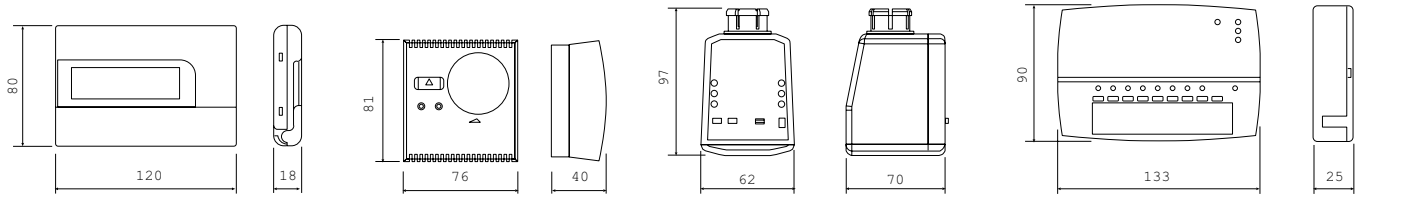


Pull manual operation
Capacity approx. 600pcs
Wall-mounted
Dimensions (LxWxH) 285 x 145 x 415

1DC RDC009 — **Paper tissue set for dispensers** — **1**

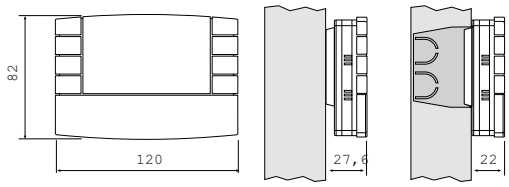
no. 24 packages with 50 pcs

Wireless temperature control devices

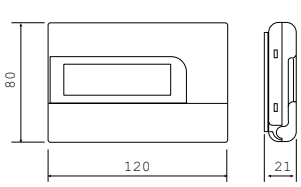


CRTX03 **TETX03** **VTRX01/3** **CCRX01 RX01/P RX02/P RX0801/P**

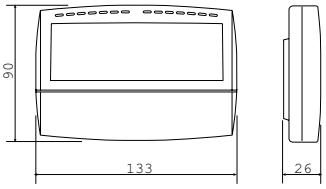
Semi-recessed and/or wall-mounted wired temperature control equipment



CR022 CR023 CR024 CR025



CR011



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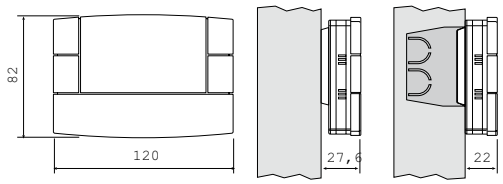
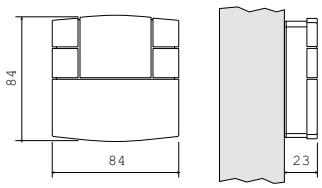
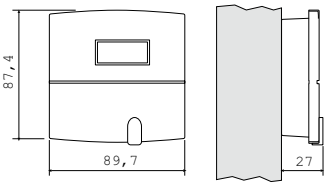


TE520 TE521 TE525

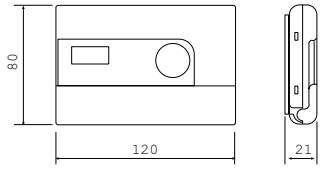


TE530 TE531

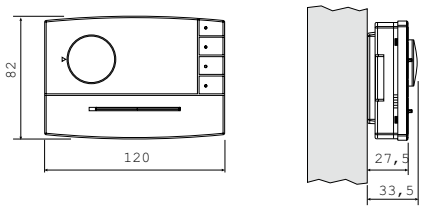


TE532

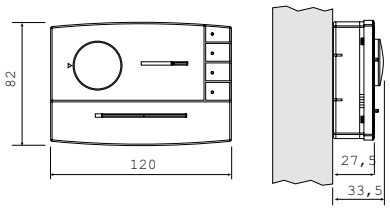
Wall-mounted wired temperature control equipment



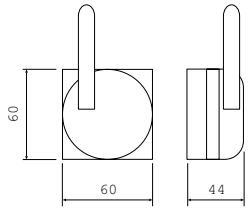
TE400/B TE410/B TE402/B TE411/B



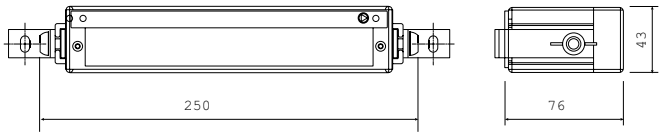
TE500 TE501 TE502 TE503 TE504



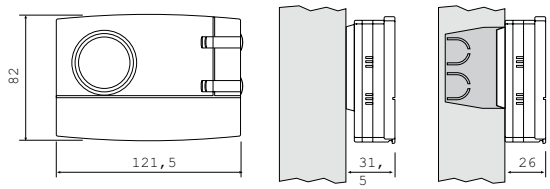
TE565 TE566



RX01M



BC0401/230 BC0601/230 BC0801/230



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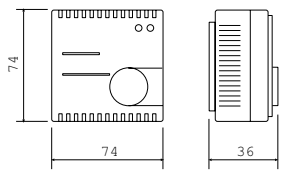
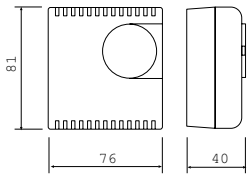
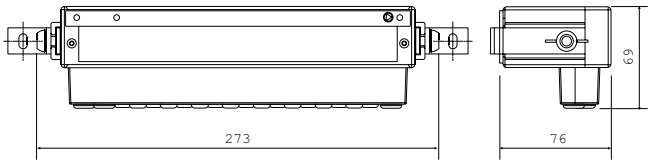


TE036 TE041 TE046
TE065 TE066



TEG130 TEG131 TEG131RA
TEG132 TEG136 TEG138RN

Industrial temperature control devices



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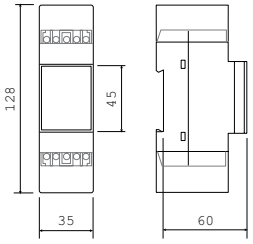
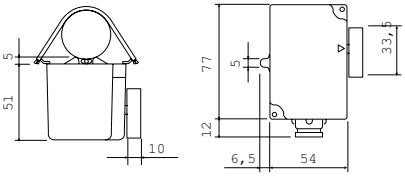


TE082 TE083 TE084
TE052/M TE075 TE076
TE077 TE078



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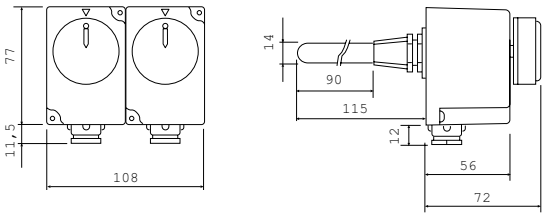

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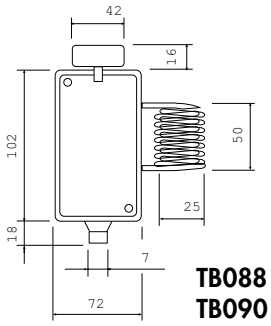

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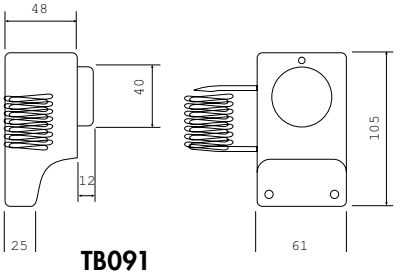
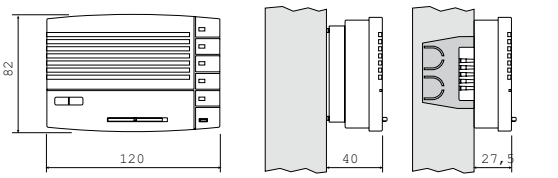
TB090



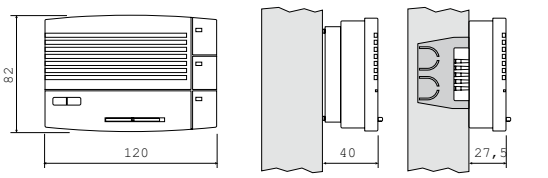
TB091

Gas safety for semi-recessed / wall-mounted civil installation



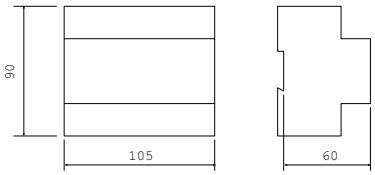
with accessory

47917MET/P 47917GPL/P
50917MET/P 50917GPL/P

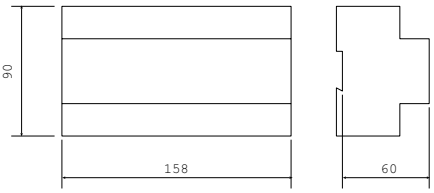


with accessory

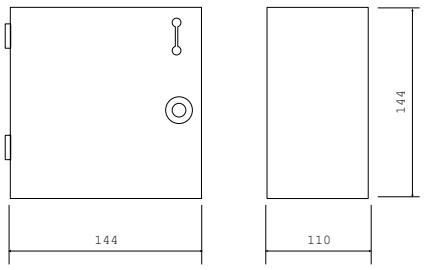
48917MET/P 48917GPL/P
51917MET/P 51917GPL/P



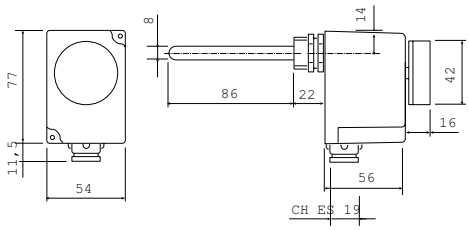
GA2001 GA2002



GA2004



GA4001 GA4004



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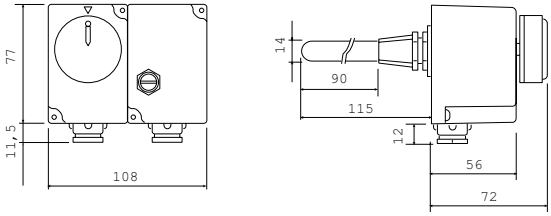

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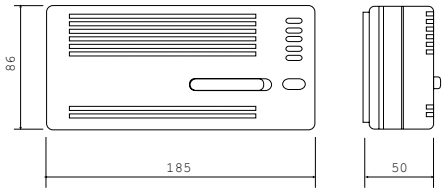
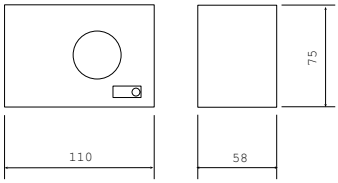


50916/CHCO **50916/CO**



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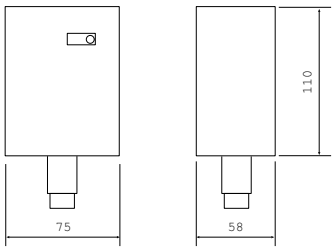
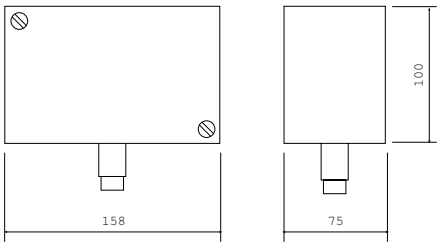
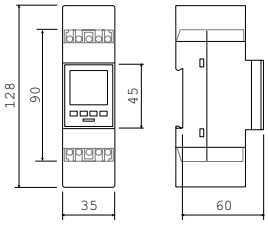


GA4200MET **GA4200GPL**
GA4400CO

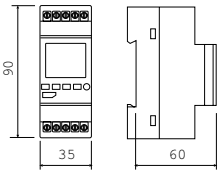


GA4200MET/A **GA4200GPL/A**
GA4400CO/A

Digital time switches



4090 4290



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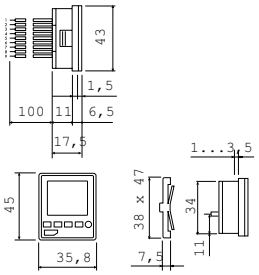
5090 5290 5091 5291
5091S 5291S



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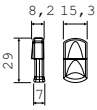

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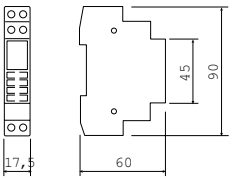

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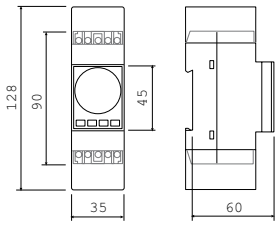

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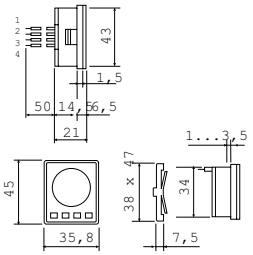

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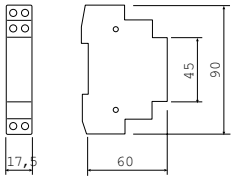

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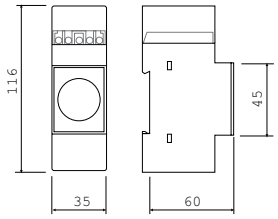

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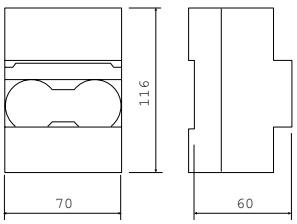

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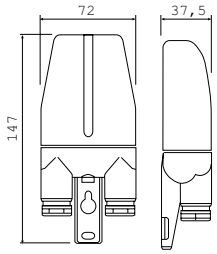
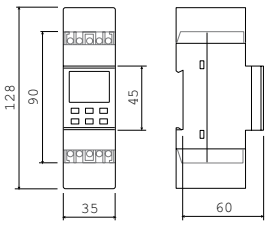


RXDCF77
RXGPS01



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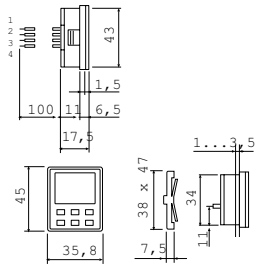
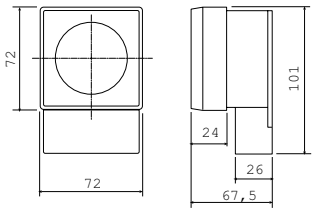
1081 1281 1080 1280



1080/M 1280/M
1081/M 1281/M



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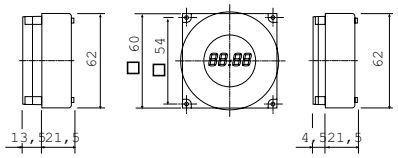
0012 0014 0015



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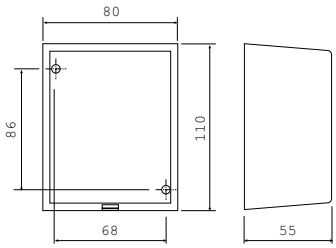
Staircase timers



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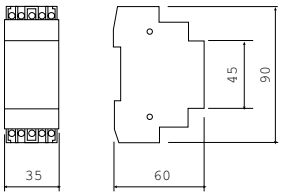
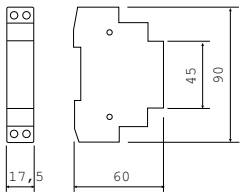
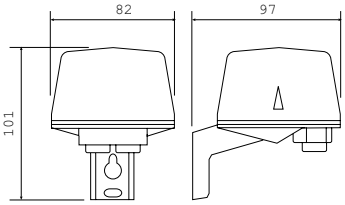


1061



1063 1063.2
1065.2 1066

Photocell lighting control switches



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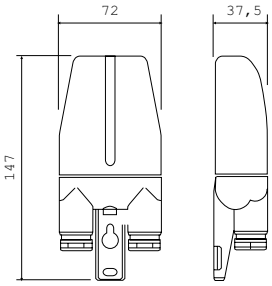

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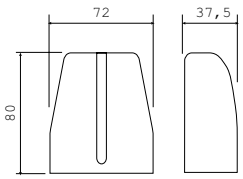

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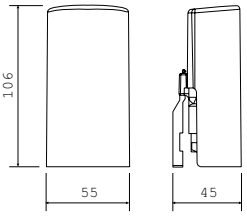

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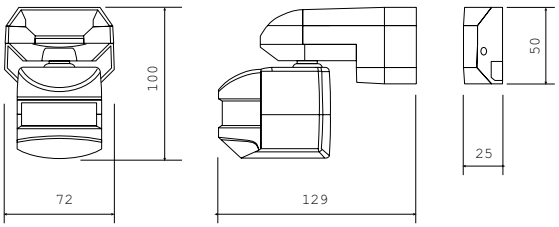
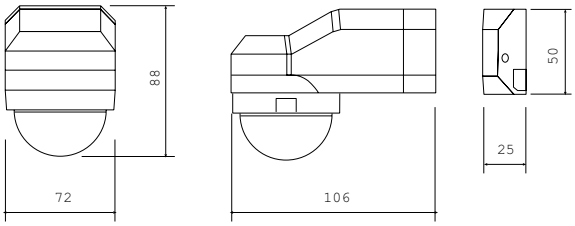
Movement detectors

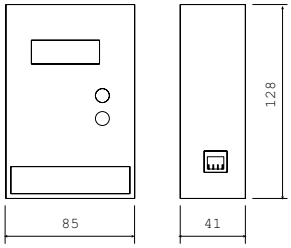


SP001 SP002

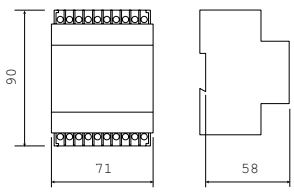


SP005

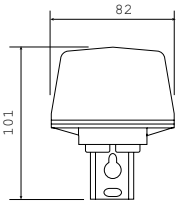
Telephone programmers



TT003



TT005 TT005/AE
TT006 TT006/AE



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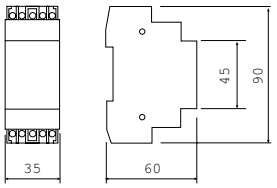
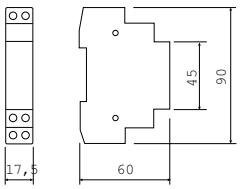


7051 **7052**



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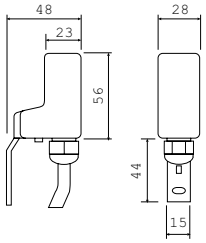

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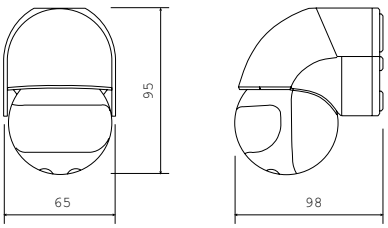

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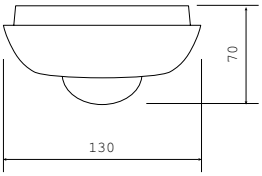
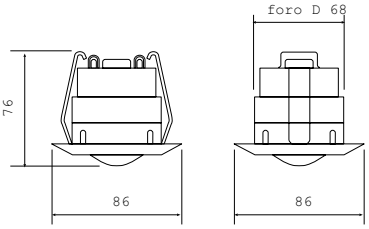
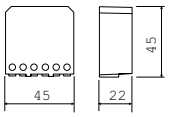


SP015



SP020

Impulse relays



0112AC/I
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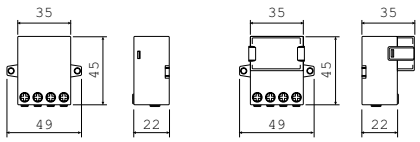
0612AC/I
06230AC/I



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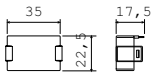
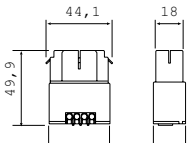


CPL002



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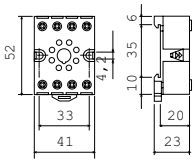
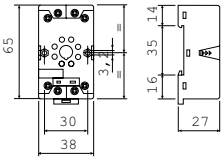
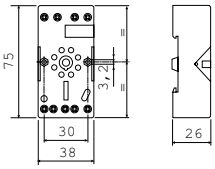


EK8



ES8



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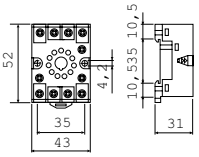
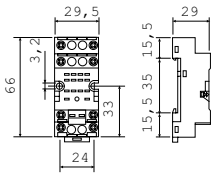
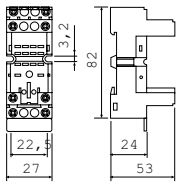


EK11

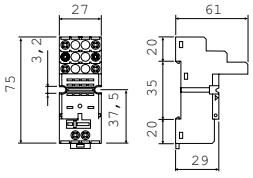
Impulse relays - Overall sockets dimensions



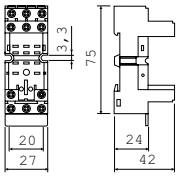
ES15/2B



ES15/2N

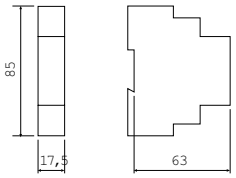


ES15/2S

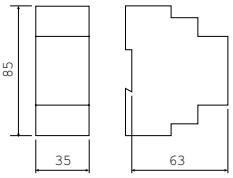


ES15/3N

Measuring instruments



SD05CEM/2



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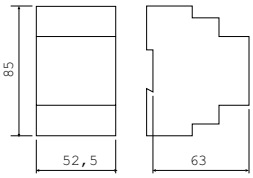
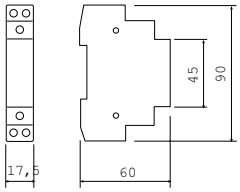
SD04V/2
SD10MT/2
SD03A/2
SD05MM/2



SD11CCE/4



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02230AC/M 0412AC/M
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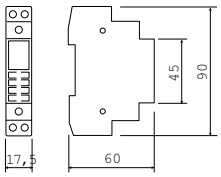
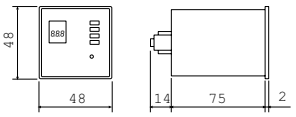
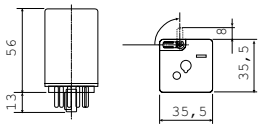


200/MT/MF
200/230/MF
200/230/ST



250/MT/MF
250/230/MF
250/230/ST



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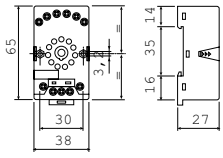
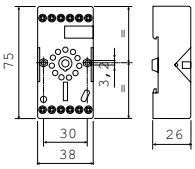


ES11



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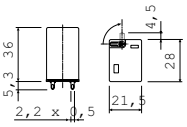

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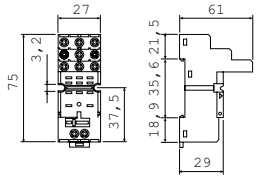
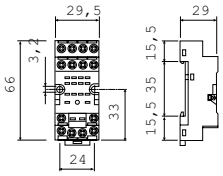
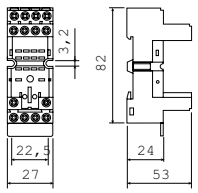


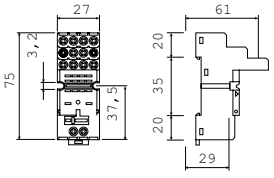
ES15/3S



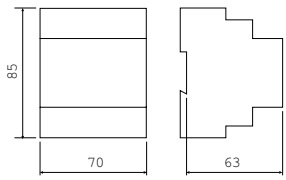
ES15/4B



ES15/4N

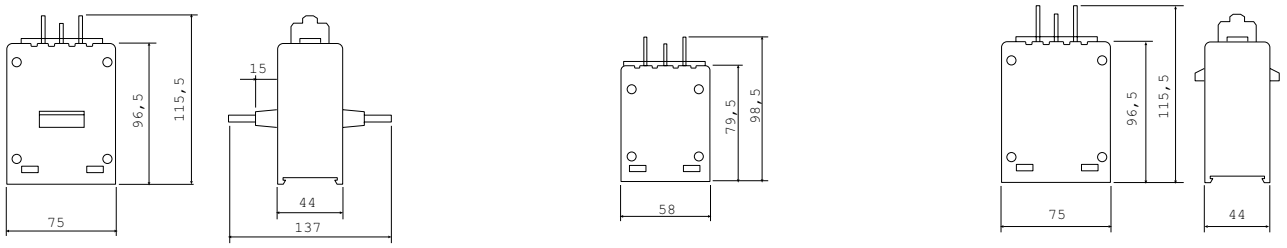


ES15/4S

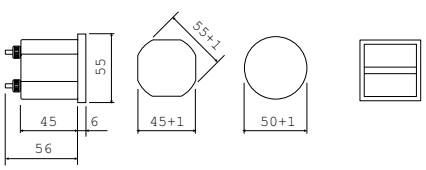


SD07CET/4 SD08CET/4
SD09CET/4 SD31AR/4

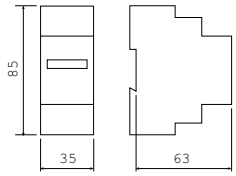
TA transformers
General drawings for all models 1TA TA00/... - 1TA TA02/... - 1TA TA03/... - 1TA TA04/...- 1TA TA05/...- 1TA TA06/...



Hour counters

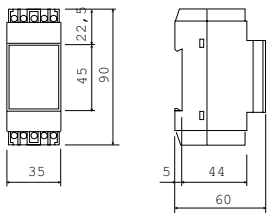


2400 1100 2200
3800 CC1236

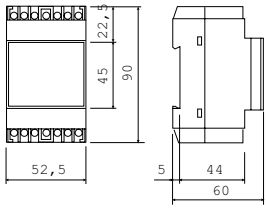


CO24/2 CO110/2
CO230/2 CO36C/2

Transformers



TR10SI/QOD
TR15SI/QOD
TR15SI/DDV



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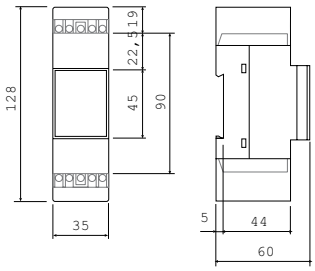

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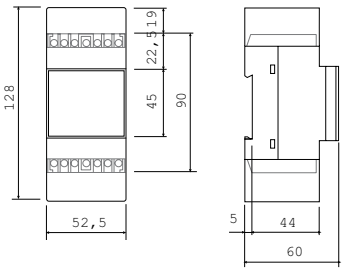
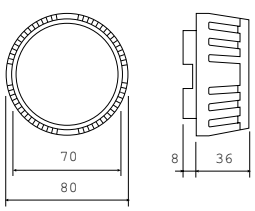
TR01403/N



TR01409/N
TR01404/N
TR01435/N

Chimes



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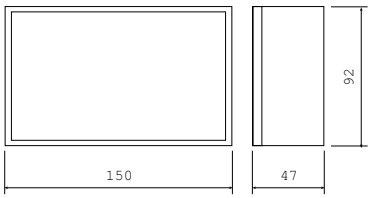

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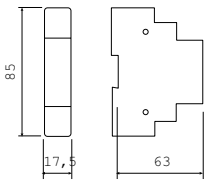
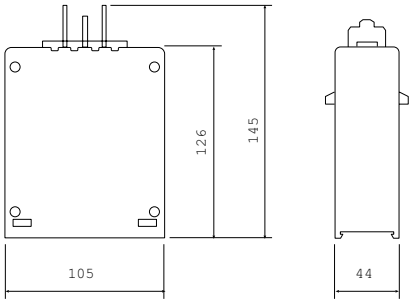
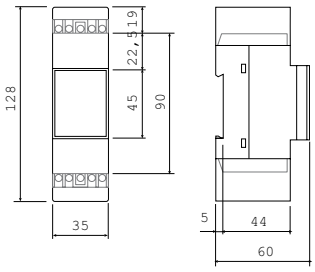
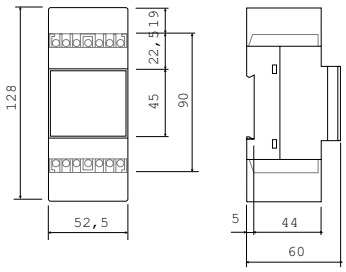


RZ230/1 RZ12/1
SU230/1 SU12/1

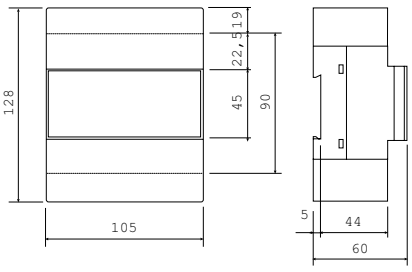




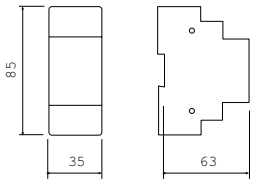
TR010/QOD
TR015/QOD
TR010/DDV
TR015/DDV



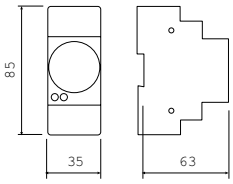
TR024/DDV
TR030/DDV
TR040/DDV



TR063/DDV

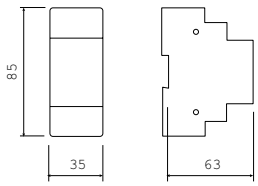


TRSU/2
TRSURZ/2
TRRZ/2
SUE/2

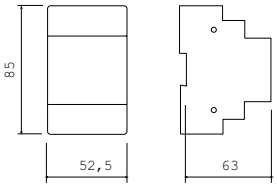


LE/2

Level regulators

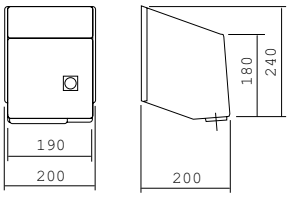


RLE024/2 RLE230/2 RLE230E/2

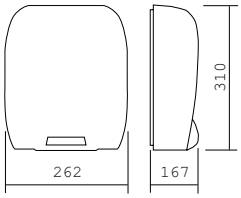


RLEME/3

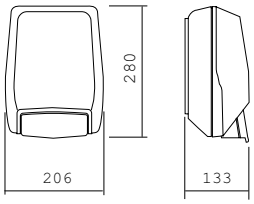
Hygiene devices



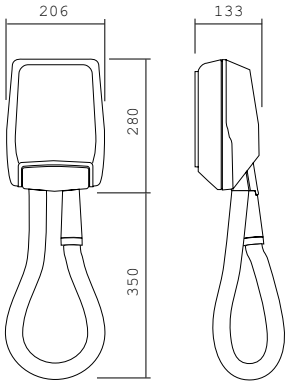
ASM01N
ASE02N



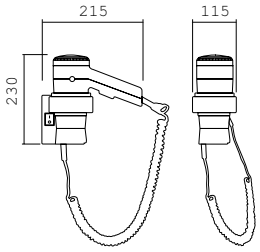
ASE03



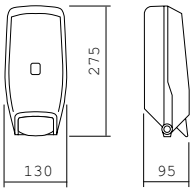
AMP03
AMF04
ACP06



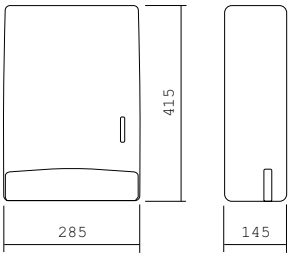
ACT10
ACT11
ACT12



ACPH13



DS008



DC009

A – WARRANTY RETURNS
Warranty returns will include all products that are considered to be out of order and sent DDP (Delivery Duty Paid) to our headquarter in Veniano (CO) - Italy - via Milanese 11, within the period of 24 months from the manufacturing date specified in each individual product. As far as the aforesaid products are concerned, they will be replaced with brand new products, except for the items whose sales price, net of discount, is higher than 52.00 €. For technical reasons, all Hygiene Devices are excluded, as a laboratory check is necessary for them before the full acceptance of the WARRANTY, with subsequent repairing. It is understood that in case of products whose sales price net of discount is higher than 52.00 €, the necessary repairs will be carried out, and then the products will be resent to the sender. In case of Warranty products, no charge will be issued, except in case the product is damaged and/or tampered with due to installation negligence. In this case, they will be considered as non-warranty returns.

B – NON-WARRANTY RETURNS
Non-warranty returns will include all products that are sent DDP (Delivery Duty Paid) to our headquarter in Veniano (CO) - Italy after the period of 24 months, and within 5 years from the manufacturing date specified in each individual product. As far as all non-warranty products are concerned, we will replace the products with a new product and/or with an item that was recovered as new product, and we will charge 50% of the product cost according to the prices of the pricelist in force. It is understood that in case of products whose sales price net of discount is higher than 52.00 €, and for technical reasons, all Hygiene Devices will be subject to the necessary repairs, and then will be resent to the sender. Note. All items not included in the catalogue any more, but within 5 years from the above-mentioned date in each individual product, will be repaired or replaced with equivalent products, and then resent to the sender at the aforesaid conditions.

C – PRODUCTS RETURNED LATER THAN 5 YEARS
The products that are returned later than 5 years from the production date labelled on the product will be resent to the sender without being subject to any intervention.

GENERAL TERMS AND SALES CONDITIONS

1 – ACCEPTANCE OF THE CONTRACT
Each order is accepted according to the following sales conditions and general terms, unless otherwise agreed, to be confirmed in writing by Perry Electric.

2 – TERMS OF DELIVERY
Orders are accepted with a delivery date within 45 days, unless otherwise agreed, to be confirmed in writing by Perry Electric.

3 – PRICES
Prices are without VAT.

4 – RISKS
The goods always travel at the risk of the purchaser who, in its own interest, must check the quantity and the conditions of the goods before the collection and eventually express proper reserves to the transporting company.

5 – TRANSPORT
Transport is, if not specifically indicated, at the customers' charge.

6 – SPECIAL VOLTAGE
For orders with supply voltages different from those indicated in the catalogue, there will be at least a 15% increase on the standard price.

7 – NON STANDARD QUANTITIES
For quantities different from the standard packing, there will be a 3% increase on the standard price.

8 – CLAIMS
Claims have to be made in writing to Perry Electric in Veniano (CO) - Italy - via Milanese 11, within 8 days from goods receipt. Perry reserves the right or not to accept the return of eventual faulty devices that have to be sent DDP (Delivery Duty Paid) to our headquarter in Veniano (CO) - Italy - via Milanese 11.

9 – PAYMENT TERMS
Payments must be done for the fixed amount at the fixed dates. In case of delay in payment, even partial, beyond the terms agreed at the time of order, Perry Electric is entitled to apply an interest rate equivalent to the banks' current interest rate increased by 4%.

10 - COMPETENT COURT
The Court of Milan – Italy, will be competent for all disputes.

11 - VERIFICATION OF LOCAL STANDARDS
The importer/distributor is obliged to verify the local standards and regulations of the country of sale/installation of the product.

Technical data and information mentioned in this documentation are subject to modifications. Perry Electric reserves the right to modify the mentioned specifications without prior notice, at any time, according to the evolution of materials and technologies. The products must be installed in compliance with the general standards in force, by qualified electricians. Perry Electric declines any liability in connection with the use of products that provide for special environmental and/or installation standards, whose compliance falls under the competence of the installer.

"POOL COMENSE 1872" **OFFICIAL SPONSOR**









Our Company is the official sponsor of the basket team **Pool Comense**, a team with a glorious history: the sole team having won, at the same time, the **Italian League**, **the Cup of Italy, the Champions League** and the **Intercontinental Cup**.

An example for the people of **Perry Electric** that shows how far is it possible to go in Italy and in the world when the single's skills are fused into a winning group.

We take these athletes' example and we hope to be able to reach the same goals in our "**league**" asking them to help us to promote our brand in Italy and in the world.

Perry Electric srl
The President

Perry Electric srl

Official sponsor of
Pool Comense 1872

- Athletics
- Basketball
- Gymnastics
- Fencing

CATALOGUE
2010/2011

CAPE2010GB



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